1247 From Box # 4-35-28

(This section to be completed by st	ubcontractor requesting document)
	Necessary Center It Center (is requested to provide the following document)
	expected receipt of document 8/11/95
Document number	Date of document 8/47 - 12/47
Title and author (if document is unn Cascade Services Department P Health Survey Report —> Plase Coperanler Up to	raess Laboratory Radiation Shoup
This section to be completed by De	·
Date request received	7/18/95.
Date submitted to ADC	7/19/95
Date submitted to HSA Coordinator_	7/18/5
This section to be completed by HS	SA Coordinator)
ate submitted to CICO	7/17/95 7/31/95
ate received from CICO	7/31/95 8/3/95
atesubmitted to ChemRisk/Shonka a	nd DOE8/9/95
This section to be completed by Ch	emRisk/Shonka Research Associates, Inc
ate document received	The second contraction of the second contrac

## EXTRACT FROM FOLDER CONTAINING PROCESS DIVISION SURVEYS (1947)

Compiled by
S. G. Thornton
Environmental Management Division
OAK RIDGE K-25 SITE
for the Health Studies Agreement

July 1995

Oak Ridge K-25 Site
Oak Ridge, Tennessee 37831-7314
managed by
LOCKHEED MARTIN ENERGY SYSTEMS, INC.
for the U.S. DEPARTMENT OF ENERGY
under Contract DE-AC05-84OR21400

UNCLASSIFIED

(level and category)

This document has b	cen approved	for	releas <b>e</b>
This document has be to the public by.  San W. Hall for Technical Information	n A.S. Quis	+ 8	12/95
Technical Information Oak Ridge K-25 Site	Officer	<u>i</u>	Daté

#### R-E-S-TRICTED

#### CASCATE GERVICES DEPARTMENT

#### PROCESS LABORATORY

#### RADIATION GROUP

#### HEALTE SURVEY REPORT

Date of Issue December 12, 1947

#### DISTRIBUTION LIST

Mr. E. M. Blackshor

Mr. W. C. Hartman

Mr. A. P. Huber

Mr. W. B. Humes

Mr. W. S. Jones

Mr. L. F. Meber

Mr. M. S. Lisso

Mr. D. J. Mahegan

Mr. J. A. Marshall

Mr. H. M. Prouss

Mr. M. F. Schwenn

Mr. M. P. Seyfried

Mr. G. T. E. Sheldon

Mr. B. Speyers

Mr. M. B. Stringfellow

Mr. 8. Visner

Mr. R. M. Williams

Mr. L. C. Willson

Mr. R. A. Winkel

File

#### HEALTH SURVEY REPORT

To: Mr. G. T. E. Sheldon

Date: December 8, 1947

Location: K-303-7

12-1-47 In the K-1501 conversion room all beta-gamma measurements on the heaters, cold traps, and reactors were zero.

Beta-gamma measurements on the work bench, tool table, and decontamination tanks in the K-1803 decontamination room varied from 0.000 to 0.024 and averaged 0.004 R/6 hours.

12-2-47 All beta-gamma measurements on the cylinders, carbon traps, and withdrawal lines in K-651 were zero.

Beta-gamma measurements on the cylinders in K-131 varied from 0.007 to 0.010 averaging 0.009 2/3 hours.

12-4-47 In K-631 all be ta-gamma measurements on the cylinders were zero.

The beta-gamma measurements on the cylinders in K-131 varied from 0.007 to 0.014 and averaged 0.010 R/8 hours.

Beta-gamma measurements on the reactors, cold traps, and heaters in the K-1301 conversion room were all zero.

In the K-1303 decontamination room bota-gamma measurements on the tool table and decontamination tanks varied from 0.000 to 0.024 averaging 0.003 R/8 hours.

12-5-47 Beta-gamma measurements were made on ten (10) welding machines in K-1131, and all were zero.

Air samples of air-borne alpha-active dust were as follow:

12-1-47	0.2	Alpha counts/min/ft8
12-2-47	0.1	•
12-5-47	0.1	•
12-4-47	2.9	•
12-5-47	1.2	*
	12-2-47 12-5-47 12-4-47	12-2-47 0.1 12-8-47 0.1 12-4-47 2.9

K-1301, inside of weighing room, operators were respirators 12-1-47 25.6



K-1301, inside of transfer roca	12-4-47	0.1	Alpha counts/min/ft3
K-1305, decontamination room,	12-1-47	0.5	
between tanks A & 3	12-4-47	0.4	
K-1405, center of laboratory	12-1-17	0.2	•
K-1405, center of large room	12-1-47	0.2	~
K-651, near withdrawal manifolds	12-2-47	0.1	<u>.</u>
•	12-4-47	0.2	-
K-631, sampling line of drain line			•
#1 being cut, 1' from operation	12-4-47	0.5	
K-131, near center of room	12-2-47	0.1	-
	12-4-47	0.1	~
K-151, valve being changed on cylinder,		•	
6 inches from operation	12-5-47		_
Before operation was started		0.1	. •
Old valve being removed and			_
new one being installed		0.1	. <b>.</b>
After operation was completed		0.2	•
K-131, valve being changed on cylinder,	L*	•	
from operation	12-4-47		
Old valve being removed and			_
new one being installed		9.0	<b>*</b>
After operation was completed		0.4	₩
K-131, flexible hose in bath C being			_
out, 2 feet from operation	12-4-47	0.2	•
K-151, Beach Russ being removed	12-5-47	• •	
Oil being drained from pump,			_
1 feet from operation		0.0	•
After exhaust line was broken,			_
6 inches from opening		0.0	₩
K-312-5, pump shop, 2 inches above top of	£		
oylinder of Valley Iron Pump from			
K-S12-1 cell 7	12-2-47		
Before piston was removed		0.0	•
After piaton was removed		0.5	•
K-512-2, cold trap room, Beach Russ pump	being pull	ed	
Before pump was opened,	~ . <del>-</del>		
1 foot from pump	12-2-47	0.0	*
Intake line being cut;			
1 foot from operation	12-3-47	0.0	•
End of cylinder chamber being	•		
out off and oylinder being re-			
moved, I foot from operation	12-3-47	0.1	•
After operation was completed	12-3-47	0.0	*
K-1401, seal shop, between north and	-		
center tables	12-4-47	0.0	•
AATIAAT AMATAA			



K-301-2, cell 3 pump 6A, seal change,	•		
1 foot from operation	12-4-47		
Before operation started		0.1	Alpha counts/min/ft3
Seal exhaust lines being dis-			_
connected		0.2	•
Old seal being removed and backpl			
being washed with trichlorosthyle	no,		
operators were gas masks		<b>58.</b> 0	<b>16</b>
Metal gasket rings being seated a	nd		
new seal being installed		0.5	*
Alpha surface measurements were as follo	<b>3</b> :		
K-1301 Conversion Room	12-1-47		Instrument Number 158
Top of cold trap D		59068	Alpha counts/min.
Top of cold trap C		1376	•
Top of cold trap B		1223	•
Top of cold trap A		917	₩
Top of heater D		13290	₩
Top of heater C		2295	<b>u</b>
Top of heater B		7883	•
Top of heater A		8860	Ħ
Floor under reactor D		5907	•
Floor under reactor C		47254	•
Floor under reactor B		20674	*
Floor under reactor A		5907	•
Floor between cold traps A & B		1834	•
Ploor between cold traps B & C		1528	Ħ
Floor between cold traps C & D		1223	•
Floor near East door		0	Ħ
Floor near south door		1070	Ħ
Floor near north door		611	•
K-1303 Decontamination Room	12-1-47		Instrument Number 168
Top of work bench north and		1070	Alpha counts/min.
Top of work bench south end		764	<b>₩</b>
Top of work bench center		1225	<b>*</b>
Top of tool table, west end		0	<b>₹</b>
Top of tool table, east end		1223	<b>*</b>
Top of tool table,		459	<b>*</b>
Top of tank L. north side		22150	•
Top of tank L, south side		20674	<b>=</b>
Top of tank L, east side		26580	•
Top of tank L, west side		22150	<b>-</b>
Top of tank E, north side		4430	•
Top of tank E, south side		56115	
Top of tank E, east side		1987	•
Top of tank E, west side		4586	•

K-1303	Decentamination Room (Cont'd.)	12-1-47	Instrument Number 158
	Top of tank A, north side	11814	Alpha counts/min.
	Top of tank A, south side	11814	9
	Top of tank A, east side	14767	•
	Top of tank A, west side	8860	*
·	Floor south of tank A	11814	#
	Floor south of tank A	13290	•
	Top of tank C, north side	<b>55</b> 63	₩
	Top of tank C, south side	1376	**
	Top of tank C, west side	5210	. •
	Top of tank C, east side	1376	<b>*</b>
	Floor south of tank C	3974	*
	Floor south of tank W	8860	<b>17</b>
	Floor south of tank W	11814	<b>4</b>
	Floor south of tank A	11814	<b>9</b>
	Floor south of tank A	13290	#
	Floor west of tank A	2140	<b>n</b>
	Floor north of tank A	3860	•
K-1405	Laboratory	12-1-47	Instrument Number 158
	Top of west sink table	0	Alpha counts/min.
	Top of west sink table	163	•
	Top of west sink table	0	•
	Top of south sink table	0	•
	Top of south sink table	0	# _
	Top of south sink table	0	<b>*</b>
	Under East hood	0	•
	Under east hood	<b>306</b>	<b>*</b>
	Under east hood	153	*
	Under east hood	306	-
	Top of north sink table	306	-
	Top of north sink table	153	
	Top of north sink table	0	-
	On floor in center of laboratory	306	•
	On floor in center of laboratory	. 153	**
	Floor in front of cabinet	5 <b>350</b>	
	Floor in front of cabinet	2446 459	*
	Floor in front of cabinet	409	
K-1405	Large Room	12-1-47	Instrument Number 158
	On floor near center of room	305	Alpha counts/min.
	On floor near center of room	459	•
	On floor near center of room	0	•
	On floor near center of room	0	₩
	On floor near south wall	163	₩
	On floor near south wall	0	π
	Bed of scales	0	Ħ
		•	-

Top of work bench	K-1405 Large Room (Cont'd.)	12-1-47	Instrument Number 158
Top of work bench fop of work bench fop of work bench Floor near east door Floor near north door Floor under platform  Cn scales #1 Cn scales #2 Cn scales #2 Cn floor south end of scales #3 Cn floor between scales 1 & 2 Cn floor between scales 2 & 3 Floor under drain line #1 Cn floor west of scales #1 Cn floor west of scales #1 Cn floor east of scales #1 Cn floor east of scales #3 Cn floor perator's desk Floor front of operator's desk Floor front of operator's desk Floor on north end of unit D Box on north end of unit C Floor dunit B Floor dunit B Floor of unit C Floor of unit C Floor of unit B Floor of unit B Floor of unit B Floor of floor between unit A & B Floor of floor between unit A & B Floor of floor between unit B & C Floor between unit C & D Floor under F-1 Carbon Trap Floor under F-2 Carbon Trap Floor under F-2 Carbon Trap Floor under F-2 Carbon Trap Floor north of unit B Floor on orth of unit B Floor north of unit B Floor on orth of unit B Floor o	Top of work bench	٥	Alpha gounts/min.
Top of work bench Top of work bench Top of work bench Top of work bench Thor near seat door Floor near north door Floor under platform Floor under platform Floor under platform Thor under platform Thor under platform The seales #1  On scales #1  On scales #2  On scales #3  On floor south end of scales #1  On floor south end of scales #2  On floor south end of scales #3  On floor south end of scales #3  On floor between scales 1 & 2  On floor between scales 2 & 3  Floor under drain line #1  On floor west of scales #3  On floor powerator's deak  Floor under drain line #2  On floor operator's deak  Floor operator's deak  Floor operator's deak  Floor on north end of unit D  Box on north end of unit B  Box on north end of unit B  Top of unit A  Top of unit A  Top of unit B  Top of unit D  On floor between unit A & B  On floor between unit A & B  On floor between unit B & C  Floor under F-1 Carbon Trap Floor north of unit B  Bod of scales  Instrument Humber 168  **  Instrument Humber 168  **  Alpha counts/min.  **  Instrument Humber 168  **  Instrument Humber 168  **  Alpha counts/min.  **  Instrument Humber 168  **  Instrument Humber 168  **  Alpha counts/min.  **  **  **  Instrument Humber 168  **			*
Top of work bench   155			• •
Floor near morth door Floor under platform  IE-681 Withdrawal Reom  I2-2-47  Instrument Humber 168  On scales #1 On scales #2 On scales #3 On floor south end of scales #1 On floor south end of scales #2 On floor south end of scales #2 On floor between scales 1 & 2 On floor between scales 2 & 3 On floor between scales 2 & 5 Floor under drain line #2 On floor west of scales #3 On floor west of scales #3 On floor reat of scales #3 Top of operator's deak Floor front of operator's deak O  I-151 Feed Room  I2-2-47  Instrument Humber 168  Box on north end of unit D Box on north end of unit B Box on north end of unit B Top of unit A Top of unit A Top of unit B Top of unit B Top of unit D On floor between unit A & B Top of unit D On floor between unit A & B Top of unit D On floor between unit B & C On floor between unit B & C On floor between unit C & D Floor under F-2 Carbon Trap Floor under F-2 Carbon Trap Floor under B C C Floor under B C C Floor under F-2 Carbon Trap Floor north of unit B Floor on orth of unit B Flo			•
Floor under platform   155   155   155   158	•	_	•
Floor under platform  12-2-47  Instrument Humber 158  On scales #1 On scales #2 On scales #5 On floor south end of scales #1 On floor south end of scales #2 On floor south end of scales #2 On floor south end of scales #3 On floor between scales 1 & 2 On floor between scales 1 & 2 On floor between scales 2 & 3 Floor under drain line #1 Floor under drain line #1 On floor west of scales #5 On floor est of scales #5 On floor est of scales #5 Top of operator's desk Floor front of operator's desk Floor front of operator's desk  K-151 Feed Room  12-2-47  Instrument Humber 158  Box on north end of unit D Box on north end of unit B Sox on north end of unit B Top of unit A Top of unit A Top of unit B Top of unit C On floor between unit A & B On floor between unit A & B On floor between unit B & C On floor between unit C & D Floor under F-1 Carbon Trap Floor under F-2 Carbon Trap Floor north of unit B Red of scales  1834		<u> </u>	<b>#</b>
K-631 Withdrawal Reom  12-2-47  Instrument Humber 168  Cn scales #1 Cn scales #2 Cn scales #5 Cn floor south end of scales #1 Cn floor south end of scales #2 Cn floor south end of scales #3 Cn floor between scales 1 & 2 Cn floor between scales 1 & 2 Cn floor under drain line #1 Floor under drain line #2 Cn floor west of scales #5 Cn floor west of scales #5 Cn floor west of scales #5 Top of operator's desk Floor front of operator's desk  K-151 Feed Room  12-2-47  Instrument Number 168  Box on north end of unit D Box on north end of unit B Extra north end of unit B Extra north end of unit B Top of unit A Top of unit A Top of unit B Top of unit C Cn floor between unit A & B Cn floor between unit A & B Cn floor between unit B & C Cn floor between unit C A D Floor under F-1 Carbon Trap Floor north of unit B Floor north of unit A End of scales			*
On scales #1 On scales #2 On scales #2 On scales #3 On floor south end of scales #1 On floor south end of scales #2 On floor south end of scales #2 On floor south end of scales #3 On floor between scales 1 & 2 On floor between scales 1 & 2 On floor between scales 2 & 3 Floor under drain line #1 Floor under drain line #1 On floor west of scales #1 On floor west of scales #3 On floor seat of scales #3 Top of operator's desk Floor front of operator's desk O  K-131 Feed Room  12-2-47  Instrument Number 168  Box on north end of unit D Sox on north end of unit A Sox on north end of unit A Floor unit A Top of unit A Top of unit A Top of unit B Top of unit C Top of unit B Top of unit B Top of unit B Top of unit C Top of unit B Top of unit B Top of unit B Top of unit C Top of unit B Top of unit C Top of unit C Top of unit B T			•
On scales #2 On scales #3 On scales #5 On scales #5 On floor south end of scales #1 On floor south end of scales #2 On floor south end of scales #3 On floor between scales 1 & 2 On floor between scales 1 & 2 On floor between scales 2 & 3 Floor under drain line #1 Floor under drain line #1 On floor west of scales #3 On floor west of scales #3 Top of operator's desk Floor front of operator's desk  K-151 Feed Room  12-2-47  Instrument Number 158  Box on north end of unit D A280 Box on north end of unit C A2751 Box on north end of unit B A280 Box on north end of unit A A59 Top of unit A A59 Top of unit B A69 Top of unit B A69 Top of unit B A69 Top of unit B On floor between unit A & B On floor between unit B & C On floor between unit C & D Floor under F-1 Carbon Trap Floor north of unit B Floor north of unit A Floor north of unit B Floor north of unit A Floor north of uni	K-631 Withdrawal Reom	12-2-47	Instrument Humber 158
On scales #2 On scales #3 On scales #5 On scales #5 On floor south end of scales #1 On floor south end of scales #2 On floor south end of scales #3 On floor between scales 1 & 2 On floor between scales 1 & 2 On floor between scales 2 & 3 Floor under drain line #1 Floor under drain line #1 On floor west of scales #3 On floor west of scales #3 Top of operator's desk Floor front of operator's desk  K-151 Feed Room  12-2-47  Instrument Number 158  Box on north end of unit D A280 Box on north end of unit C A2751 Box on north end of unit B A280 Box on north end of unit A A59 Top of unit A A69 Top of unit B A60 Top of unit B A60 Top of unit B A611 Top of unit B A60 Floor under F-1 Carbon Trap Floor north of unit B Floor north of unit A Floor north of unit B Floor north of unit B Floor north of unit A Floor north of unit B Floor north of unit A Floor nor	On scales #1	153	Alpha counts/min.
On scales #5 On floor south end of scales #1 On floor south end of scales #2 On floor south end of scales #2 On floor south end of scales #3 On floor between scales 1 & 2 On floor between scales 1 & 2 On floor between scales 2 & 3 Floor under drain line #1 Floor under drain line #1 On floor west of scales #1 On floor east of scales #1 On floor east of scales #3 Top of operator's desk Floor front of operator's desk  K-151 Feed Room  12-2-47 Instrument Number 158  Box on north end of unit D A280 Box on north end of unit B Box on north end of unit B Top of unit A Top of unit A Top of unit B Top of unit C Top of unit C Top of unit B Top on under F-2 Carbon Trap Thoor north of unit B Top on north of unit B			7
On floor south end of scales #1 On floor south end of scales #2 On floor south end of scales #3 On floor between scales 1 & 2 On floor between scales 2 & 3 Floor under drain line #1 Floor under drain line #2 On floor east of scales #3 Top of operator's desk Floor front of operator's desk  K-131 Feed Room  I2-2-47  Instrument Number 158  Box on north end of unit D Box on north end of unit B Box on north end of unit B Box on north end of unit A Top of unit A Top of unit B Top of unit B Top of unit B Top of unit B Top of unit D Top of unit B Top of			**
On floor south end of scales #2 On floor south end of scales #5 On floor between scales 1 & 2 On floor between scales 1 & 2 On floor between scales 2 & 3 Floor under drain line #1 Floor under drain line #1 On floor west of scales #1 On floor east of scales #3 Top of operator's desk Floor front of operator's desk  K-131 Feed Room  12-2-47  Instrument Number 168  Box on north end of unit D A280 Box on north end of unit C A2751 Box on north end of unit B A59 Top of unit A A69 Top of unit B A69 Top of unit B A69 Top of unit C A611 Top of unit D A68 On floor between unit A & B Floor under F-1 Cerbon Trap Floor under F-2 Carbon Trap Floor north of unit B Flo	•	Ō	•
On floor south end of scales #5 On floor between scales 1 & 2 On floor between scales 2 & 5 Floor under drain line #1 Floor under drain line #2 On floor west of scales #1 On floor east of scales #5 Top of operator's desk Floor front of operator's desk O  K-131 Feed Room  12-2-47  Instrument Number 158  Box on north end of unit D Box on north end of unit C Box on north end of unit B Box on north end of unit B Top of unit A Top of unit B Top of unit B Top of unit B Top of unit D Top of unit C Top of unit B Top of uni			•
On floor between scales 1 & 2 On floor between scales 2 & 3 O Floor under drain line #1 O Floor under drain line #1 O Floor under drain line #2 I 153 On floor west of scales #1 On floor east of scales #3 O Floor front of operator's desk O Floor north end of unit D A 12-2-47 Instrument Number 158  Box on north end of unit C 2751  Box on north end of unit B 1223  Box on north end of unit A 51.97  Top of unit A 459  Top of unit B 459  Top of unit C 611  Top of unit D 3974  On floor between unit A & B 611  On floor between unit B & C 611  On floor between unit C & D 764  Floor under F-1 Carbon Trap 764  Floor under F-2 Carbon Trap 611  Floor north of unit B 1223  Floor north of unit B 1225			•
On floor between scales 2 & 3	<del></del>		ų
Floor under drain line #1 Floor under drain line #2 On floor west of scales #1 On floor east of scales #5 Top of operator's deak Floor front of operator's deak  K-151 Feed Room  I2-2-47  Instrument Number 158  Box on north end of unit D Box on north end of unit C Box on north end of unit B Box on north end of unit B Box on north end of unit A Box on north end of unit A Floor funit B Floor unit B Floor unit C Floor between unit A & B Floor under F-1 Carbon Trap Floor north of unit B Floor north of unit A Floor north of unit B Floor north of unit A Floor north of unit B Floor north of unit A Floor north of unit			•
Floor under drain line #2 On floor west of scales #1 On floor west of scales #5 Top of operator's desk Floor front of operator's desk  K-151 Feed Room  12-2-47  Instrument Number 158  Box on north end of unit D Box on north end of unit C Box on north end of unit B Box on north end of unit B Box on north end of unit A Top of unit A Top of unit B Top of unit C Top of unit C Top of unit D Top of unit D Top of unit B Top of unit B Top of unit C Top of unit C Top of unit B Top of unit C Top of unit B Top of unit B Top of unit C Top of unit C Top of unit C Top of unit B Top of unit B Top of unit C Top of unit C Top of unit C Top of unit B Top of unit B Top of unit B Top of unit B Top of unit C Top of unit B Top o	Floor under drain line #1	0	#
On floor west of scales #1 On floor east of scales #5 Top of operator's deak Floor front of operator's deak  I2-2-47  Instrument Number 158  Box on north end of unit D Box on north end of unit B Box on north end of unit B Box on north end of unit B Top of unit A Top of unit B Top of unit C Top of unit D On floor between unit A & B Floor under F-1 Carbon Trap Floor north of unit B Floor north of unit A Floor scales  On floor between unit A Floor north of unit B Floor north of unit B Floor north of unit A Floor north of unit		153	•
On floor east of scales #5 Top of operator's desk Floor front of operator's desk  Character front of operator's desk  Instrument Number 158  Each on north end of unit D Each on north end of unit C Each on north end of unit B Each on north end of unit A Each of unit B Each on north end of unit A Each of unit B Each on north end of unit A Each of unit B Each on north end of unit A Each of unit B Each on floor between unit A & B Each on floor between unit B & C Each of		0	Ħ
Top of operator's desk Floor front of operator's desk  K-151 Feed Room  Box on north end of unit D Box on north end of unit C Box on north end of unit B Box on north end of unit B Box on north end of unit A Top of unit A Top of unit B Top of unit C Top of unit C Top of unit C Top of unit B Top of unit B Top of unit B Top of unit B Top of unit C Top of unit B Top o	V <sub>2</sub> ,		*
Floor front of operator's dock  K-131 Feed Room  Box on north end of unit D  Box on north end of unit C  Box on north end of unit B  Box on north end of unit B  Box on north end of unit A  Top of unit A  Top of unit B  Top of unit C  Top of unit C  Top of unit D  On floor between unit A & B  Floor under F-1 Cerbon Trap  Floor north of unit B  Floor north of unit A  Floor north of unit B  Floor north of unit A  Flore north of unit A  Floor north of unit A  Floor north of unit A	**	0	<b>n</b>
Box on north end of unit D  Box on north end of unit C  Box on north end of unit B  Box on north end of unit A  Top of unit A  Top of unit B  Top of unit C  Top of unit C  Top of unit D  On floor between unit A & B  On floor between unit B & C  On floor between unit C & D  Floor under F-1 Cerbon Trap  Floor north of unit B  Floor north of unit A  Floor north of unit A  Floor north of unit A  Bed of scales  Alpha counts/min.  4280  Alpha counts/min.  459  611  611  611  611  611  611  611  6		0	
Box on north end of unit C  Box on north end of unit B  Box on north end of unit A  Box on north end of unit B  Box on north end of unit A  Box on north end of unit B  Box on north end of unit B  Box on north end of unit A  Box on north end of unit B  Box on north end of unit A  Box on north end of unit B  Box on north end of unit B  Box on north end of unit A  Box on north end of unit B  Bo	K-151 Feed Room	12-2-47	Instrument Number 168
Box on north end of unit C  Box on north end of unit B  Box on north end of unit A  Box on north end of unit B  Box on north end of unit A  Box on north end of unit B  Box on north end of unit B  Box on north end of unit A  Box on north end of unit B  Box on north end of unit A  Box on north end of unit B  Box on north end of unit B  Box on north end of unit A  Box on north end of unit B  Bo	Box on north end of unit D	4280	Alpha counts/min.
Box on north end of unit A 5197  Top of unit A 459  Top of unit B 459  Top of unit C 611  Top of unit D 3974  On floor between unit A & B 611  On floor between unit B & C 611  On floor between unit C & D 764  Floor under F-1 Cerbon Trap 764  Floor under F-2 Carbon Trap 611  Floor north of unit B 1225  Floor north of unit A 1070  Bed of scales 1834			
Box on north end of unit A 5197 Top of unit A 459 Top of unit B 459 Top of unit C 611 Top of unit D 3974 On floor between unit A & B 611 On floor between unit B & C 611 On floor between unit C & D 764 Floor under F-1 Cerbon Trap 764 Floor under F-2 Carbon Trap 611 Floor north of unit B 1225 Floor north of unit A 1070 Bed of scales 1834		1223	•
Top of unit A 459 Top of unit B 459 Top of unit C 611 Top of unit D 5974 On floor between unit A & B 611 On floor between unit B & C 611 On floor between unit C & D 764 Floor under F-1 Carbon Trap 764 Floor under F-2 Carbon Trap 611 Floor north of unit B 1225 Floor north of unit A 1070 Bed of scales		5197	•
Top of unit B Top of unit C Top of unit D Top of unit D Top of unit D Top of unit B Top under F-2 Carbon Trap Top of unit B Top unit B Top of	Top of unit A	459	•
Top of unit C  Top of unit D  Top of unit B  Top of unit B  Top of unit C  Top of unit B  Top of unit B  Top under F-2 Carbon Trap  Theor north of unit B  Theor north of unit A  Theor north of unit A  Top of unit B	•	459	•
Top of unit D On floor between unit A & B On floor between unit B & C On floor between unit C & D Thor under F-1 Carbon Trap Floor under F-2 Carbon Trap Floor north of unit B Floor north of unit A Bed of scales  7874 611 764 764 765 765 766 766 767 768 769 769 769 769 760 760 760 760 760 760 760 760 760 760		611	*
On floor between unit A & B 611 On floor between unit B & C 611 On floor between unit C & D 764 Floor under F-1 Cerbon Trap 764 Floor under F-2 Carbon Trap 611 Floor north of unit B 1225 Floor north of unit A 1070 Bed of scales 1834	<u> </u>	3974	*
On floor between unit C & D 764  Floor under F-1 Carbon Trap 764  Floor under F-2 Carbon Trap 611  Floor north of unit B 1225  Floor north of unit A 1070  Bed of scales 1834			•
Floor under F-1 Cerbon Trap 764 Floor under F-2 Carbon Trap 611 Floor north of unit B 1225 Floor north of unit A 1070 Bed of scales 1834	On floor between unit B & C	611	•
Floor under F-2 Carbon Trap 611 Floor north of unit B 1223 Floor north of unit A 1070 Fed of scales 1834	On floor between unit C & D	764	Ħ
Floor north of unit B 1223 ** Floor north of unit A 1070 ** Bed of scales 1834 **	Floor under F-1 Cerbon Trap	764	•
Floor north of unit B 1225 Floor north of unit A 1070 Fed of scales 1834	<del>-</del>		•
Floor north of unit A 1070 ** Bed of scales . 1834 **	· · · · · · · · · · · · · · · · · · ·		#
Bed of scales 1834			•
			•
Floor west end of Cylinder rack 764 "	Floor west end of cylinder rack	764	•
Top of operator's desk 611	——————————————————————————————————————		•

K-1301 Conversion Room	12-4-47	Instrument Number 158
	1529	Alpha counts/min.
Top of cold trap A	1225	Ħ
Top of cold trap B	1529	₩
Top of cold trap C	59068	•
Top of cold trap D	5907	Ħ
Top of heater A	5907	#
Top of heater B		•
Top of heater C	5363 3 <b>5</b> 300	•
Top of heater D	15290	#
On floor under reactor A	2751	
On floor under reactor B	7384	•
On floor under reactor C	22151	•
On floor under reactor D	55964	
Wipe tests:	3070	•
Top of cold trap D	1070	#
Top of heater A	611	a
Top of heater B	764	•
Top of heater D	611	*
On floor under reactor B	<b>506</b>	 ₩
On floor under reactor C	11814	
On floor under reactor D	7584	
K-1305 Decontamination Room	12-4-47	Instrument Number 158
Worth side of top of tank A	23627	Instrument Number 158 Alpha counts/min.
North side of top of tank A South side of top of tank A	2 <b>3</b> 627 8860	
North side of top of tank A South side of top of tank A West side of top of tank A	23627 8860 10337	
North side of top of tank A South side of top of tank A West side of top of tank A East side of top of tank A	23627 8860 10337 11814	
North side of top of tank A South side of top of tank A West side of top of tank A East side of top of tank A Worth side of top of tank C	25627 8860 10557 11814 2904	
North side of top of tank A South side of top of tank A West side of top of tank A East side of top of tank A Morth side of top of tank C South side of top of tank C	23627 8860 10357 11814 2904 2598	
North side of top of tank A South side of top of tank A West side of top of tank A East side of top of tank A Morth side of top of tank C South side of top of tank C West side of top of tank C	23627 8860 10337 11814 2904 2598 2751	
North side of top of tank A South side of top of tank A West side of top of tank A East side of top of tank A Morth side of top of tank C South side of top of tank C West side of top of tank C East side of top of tank C	23627 8860 10337 11814 2904 2598 2751 917	Alpha counts/min.
North side of top of tank A South side of top of tank A West side of top of tank A East side of top of tank A North side of top of tank C South side of top of tank C West side of top of tank C East side of top of tank C North side of top of tank C	23627 8860 10337 11814 2904 2598 2751 917 3974	Alpha counts/min.
North side of top of tank A South side of top of tank A West side of top of tank A East side of top of tank A North side of top of tank C South side of top of tank C West side of top of tank C East side of top of tank C Horth side of top of tank E South side of top of tank E	23627 8860 10337 11814 2904 2598 2751 917 3974 32487	Alpha counts/min.
North side of top of tank A South side of top of tank A West side of top of tank A East side of top of tank A North side of top of tank C South side of top of tank C West side of top of tank C East side of top of tank C Horth side of top of tank E South side of top of tank E South side of top of tank E	25627 8860 10557 11814 2904 2598 2751 917 3974 32487	Alpha counts/min.
North side of top of tank A South side of top of tank A West side of top of tank A East side of top of tank A Morth side of top of tank C South side of top of tank C West side of top of tank C East side of top of tank C Morth side of top of tank C South side of top of tank E South side of top of tank E West side of top of tank E East side of top of tank E East side of top of tank E	25627 8860 10557 11814 2904 2598 2751 917 5974 32487 7584 5503	Alpha counts/min.
North side of top of tank A South side of top of tank A West side of top of tank A East side of top of tank A Morth side of top of tank C South side of top of tank C West side of top of tank C East side of top of tank C Morth side of top of tank E South side of top of tank E West side of top of tank E East side of top of tank E	23627 8860 10337 11814 2904 2598 2751 917 3974 32487 7384 5503 17720	Alpha counts/min.
North side of top of tank A South side of top of tank A West side of top of tank A East side of top of tank A Morth side of top of tank C South side of top of tank C West side of top of tank C Harth side of top of tank C Horth side of top of tank E South side of top of tank E Hest side of top of tank E Harth side of top of tank E Bast side of top of tank E Horth side of top of tank E South side of top of tank I South side of top of tank I	23627 8860 10337 11814 2904 2598 2751 917 3974 32487 7384 5503 17720 22150	Alpha counts/min.
North side of top of tank A South side of top of tank A West side of top of tank A East side of top of tank A North side of top of tank C South side of top of tank C West side of top of tank C East side of top of tank C Horth side of top of tank E South side of top of tank E West side of top of tank E Horth side of top of tank E South side of top of tank E South side of top of tank E South side of top of tank L South side of top of tank L	23627 8860 10337 11814 2904 2598 2751 917 3974 32487 7384 6503 17720 22160 25104	Alpha counts/min.
North side of top of tank A South side of top of tank A West side of top of tank A East side of top of tank A North side of top of tank C South side of top of tank C West side of top of tank C East side of top of tank C North side of top of tank E South side of top of tank E South side of top of tank E Hest side of top of tank E Bast side of top of tank E South side of top of tank E South side of top of tank L South side of top of tank L East side of top of tank L East side of top of tank L East side of top of tank L	23627 8860 10337 11814 2904 2598 2751 917 3974 32487 7384 5503 17720 22150 25104 16244	Alpha counts/min.
North side of top of tank A South side of top of tank A West side of top of tank A East side of top of tank C South side of top of tank C West side of top of tank C West side of top of tank C Horth side of top of tank C North side of top of tank E South side of top of tank E West side of top of tank E Horth side of top of tank E Horth side of top of tank E South side of top of tank L South side of top of tank L West end of tool table	25627 8860 10557 11814 2904 2598 2751 917 3974 32487 7384 5503 17720 22150 25104 16244 611	Alpha counts/min.
North side of top of tank A South side of top of tank A West side of top of tank A East side of top of tank C South side of top of tank C West side of top of tank C West side of top of tank C East side of top of tank C North side of top of tank E South side of top of tank E West side of top of tank E East side of top of tank E Horth side of top of tank E South side of top of tank L West end of tool table Center of tool table	25627 8860 10557 11814 2904 2598 2751 917 3974 32487 7584 5503 17720 22150 25104 16244 611	Alpha counts/min.
North side of top of tank A South side of top of tank A West side of top of tank A East side of top of tank A North side of top of tank C South side of top of tank C West side of top of tank C East side of top of tank C North side of top of tank E South side of top of tank E South side of top of tank E Hest side of top of tank E Bast side of top of tank E South side of top of tank E South side of top of tank L South side of top of tank L East side of top of tank L East side of top of tank L East side of top of tank L	25627 8860 10557 11814 2904 2598 2751 917 3974 32487 7384 5503 17720 22150 25104 16244 611	Alpha counts/min.

North end of work bench Center of work bench Center of work bench Center of work bench South end of work bench On floor side of work bench On floor center of room Il223 Read Read Read top side of tank A South top side of tank A South top side of tank A South top side of tank B Read top side of tank E Read top side of tank L Read top side of tank L Read top of side of tank L Read to	K-1303 Decontamination Room (Cont'd.)	12-4-47	Instrument Number 158
Genter of work bench South end of work bench On floor side of work bench On floor enter of room  Wipe tests: Horth top side of tank A South top side of tank B East top side of tank E South top side of tank L South top sid	North and of work handh		250
South end of work bench On floor side of work bench On floor center of room  Nipe tests:  Horth top side of tank A South top side of tank B East top side of tank E South top side of tank E South top side of tank L South t	Center of work bench	1834	Alpha counts/min.
On floor center of room 1225	South and of more banch		R
Wipe tests: Horth top side of tank A South top side of tank E South top side of tank E Horth top side of tank E Horth top side of tank L South top	On floor side of work house		*
Wipe tests: Horth top side of tank A South top side of tank E Wost top side of tank E Worth top side of tank E South top side of tank L South L South top side of tank L South L South top side of tank L South L Sout	On floor center of more		Ħ
North top side of tank A South top side of tank E South top side of tank L South top of side of tank L South top side of tank L South top of side of tank L South top of side of tank L South top side of tank L South top of south work bench South Top of center work bench South Top of center work bench South Top of north work bench South Top of north work bench South Top of south Work bench South Sout	on 11001 denter of PBDM	1070	•
South top side of tank A  West top side of tank A  East top side of tank A  South top side of tank E  West top side of tank E  West top side of tank E  Worth top side of tank E  Worth top side of tank L  South South L  South South L  South South L  South South South South L  South	Wipe tests:		
South top side of tank A  West top side of tank A  East top side of tank A  South top side of tank E  West top side of tank E  West top side of tank E  Worth top side of tank E  Worth top side of tank L  South South L  South South L  South South L  South South South South L  South	Morth top side of tank A	784	•
East top side of tank A 917 8  South top side of tank E 1225 8  West top side of tank E 611 8  West top side of tank L 611 8  South top side of tank L 917 8  West top of side of tank L 917 8  East top of side of tank L 917 8  East top of side of tank L 917 8  East top of side of tank L 917 8  East top of side of tank L 917 8  Top of center work bench 506 Alpha counts/min.  Top of center work bench 0 8  Top of center work bench 155 8  Top of north work bench 155 8  Top of north work bench 155 8  Top of north work bench 155 8  Top of south work bench 155	South top side of tank A		•
South top side of tank E  South top side of tank E  West top side of tank L  South top side of t	most top side of tank A	<del>_</del>	•
South top side of tank E West top side of tank E Worth top side of tank L South top of side of tank L South top of side of tank L South South South bench Top of center work bench Top of center work bench Top of north work bench Top of north work bench Top of south work bench Top of	East top side of tank A		•
West top side of tank E  Borth top side of tank L  South top side of tank L  Best top of side of tank L  Best top of side of tank L  Bast top of south work bench  Con seal  Con seal  Con seal  Bast top of south work bench  Con seal  Bast top of tank L  Bast top of tank L  Bast top of south work bench  Con seal  Con seal to seat wall  Bast top of tank L  Bast top of tank L  Bast top of south work bench  Con seales #1  Con seales #1  Con seales #2	South top side of tank E		
Morth top side of tank L South top side of tank L South top of south work bench Top of center work bench Top of center work bench Top of center work bench Top of north work bench Top of north work bench Top of north work bench Top of south work bench Top of	mest top side of tank E		•
West top of side of tank L  Best top of side of tank L  East top of side of tank L  Fast top of side of tank L  Fast top of side of tank L  Top of center work bench Top of north work bench Top of north work bench Top of north work bench Top of south work bench Top of	North top side of tank L		<b>~</b>
East top of side of tank L  East top of side of tank L  Top of side of tank L  Top of center work bench Top of north work bench Top of south work b	South top side of tank L		•
Instrument Number   Inst	mest top of side of tank L		•
Top of center work bench Top of north work bench Top of north work bench Top of north work bench Top of south work bench	East top of side of tank L		<b>,</b>
Top of center work bench Top of north work bench Top of north work bench Top of north work bench Top of south work bench To	•	12-4-47	Instrument Number 158
Top of center work bench Top of north work bench Top of north work bench Top of north work bench Top of south work bench To	Top of center work bench	<b>70</b> 0	
Top of center work bench Top of center work bench Top of north work bench Top of north work bench Top of north work bench Top of south work bench Top	Top of center work bench		Alpha counts/min.
Top of center work bench Top of north work bench Top of north work bench Top of north work bench Top of south work bench Top o	Top of center work bench		*
Top of north work bench Top of north work bench Top of north work bench Top of south work bench Top of	Top of center work bench		*
Top of north work bench Top of north work bench Top of south work bench On seal On seal On floor west of bench On floor center of room On floor center of room On floor center of room Son floor center of room On floor center of room On floor center of room Son floor center of room On floor cent	Top of north work bench		₩
Top of north work bench Top of south work bench On seal On seal On seal On floor west of bench On floor center of room On floor center of room On floor center of room Bench against east wall Bench against east wall Bench against east wall On scales #1 On scales #1 On scales #2  On Alpha counts/min.	Top of north work bench	_	<b>\</b>
Top of south work bench On seal On seal On seal On floor west of bench On floor center of room On floor center of room On floor center of room Sench against east wall Bench against east wall Bench against east wall On scales #1 On scales #2  On scales #2  On Alpha counts/min.	Top of north work bench		<b>₩</b>
Top of south work bench Top of south work bench Top of south work bench On seal On seal On seal On floor west of bench On floor center of room On floor center of room On floor center of room Bench against east wall Bench against east wall Bench against east wall Bench against east wall On scales #1 On scales #2 On scales #2 On Alpha counts/min.	Top of south work bench		
Top of south work bench Top of south work bench On seal On seal On seal On floor west of bench On floor center of room On floor center of room On floor center of room Bench against east wall Bench against east wall Bench against east wall On scales #1 On scales #2 On scales #2 On Alpha counts/min.	Top of south work bench		<b>n</b>
Top of south work bench On seal On seal On seal On floor west of bench On floor center of room On floo	Top of south work bench		•
On seal On seal On seal On floor west of bench On floor center of room On floor center of room On floor center of room Bench against east wall Bench against east wall Bench against east wall On scales #1 On scales #2 On scales #2 On scales #2	Top of south work bench		•
On floor west of bench On floor center of room On floor center of room On floor center of room Bench against east wall Bench against east wall Bench against east wall On scales #1 On scales #2 On floor center of room On fl	On seal		•
On floor west of bench On floor center of room Bench against east wall Bench against east wall Bench against east wall On scales #1 On scales #2 On Alpha counts/min.	On seal		•
On floor center of room On floor center of room On floor center of room Bench against east wall Bench against east wall Bench against east wall Bench against east wall On scales #1 On scales #2 On Alpha counts/min.	On floor west of bench		•
On floor center of room  Bench against east wall  Bench against east wall  Bench against east wall  Bench against east wall  Con scales #1  On scales #2  On Alpha counts/min.	On floor center of room	0	•
Bench against east wall  Bench against east wall  Bench against east wall  Bench against east wall  Conscales #1  Conscales #2  Conscales #2  Conscales #2  Conscales #2  Conscales #2	On floor center of room		•
Bench against east wall Bench against east wall Bench against east wall  R=651 Withdrawal Room  On scales #1 On scales #2  O Alpha counts/min.	Bench against sest well		•
Bench against east wall  Bench against east wall  K=651 Withdrawal Room  12-4-47  Instrument Rumber 15  On scales #1 On scales #2	Bench against east wall		#
Hench against east wall  K=651 Withdrawal Room  12-4-47  Instrument Number 15  On scales #1 On scales #2  O Alpha counts/min.	Bench against sast woll		#
K-681 Withdrawal Room  12-4-47  Instrument Number 15  On scales #1  On scales #2	Bench against sort wall		₩.
On scales #1 On scales #2 On scales #2 On scales #2		0	*
On scales #2 Alpha counts/min.		12-4-47	İnstrument Rumber 158
AT DUETER 45		^	43-4
	On scales #2	0	arpna counts/min.
On scales #3 611	On scales #3		•

	• •			
K-651 Withdrawal Room (	Cont'd.)	12-4-47		Instrument Number 158
Wood water and year				
On floor between se	celes #1 & 2		0	Alpha counts/min.
On floor between s	cales #2 & S		0	•
On floor south east	t corner of room		0	₩
On Floor south was	t commen of Toom		Ö	•
On floor north wes			ŏ	W
On floor center of			153	•
On floor under dra	in line wi		306	Ħ
On floor under dra			<b>306</b>	•
On operator's desk			<b>800</b>	
				Washington 160
K-151 Feed Room		12-4-47		Instrument Number 158
Box and of unit A			5808	Alpha counts/min.
Box end of unit B			2295	# a •
Box end of unit C			4280	<b>#</b>
Box end of unit D			4891	₩
Top of unit A			764	•
Top of unit B			0	₩ .
Top of unit C			0	•
			917	•
Top of unit D On floor box end o	e unit A		1223	*
			764	•
On floor box end			611	•
On floor box end			1529	. 🕊
On floor box and o			0	*
On floor between u				₩.
On floor between v			306	•
On floor between v	init ca b		153	
On floor under car	rbon trap F-1		<b>306</b>	•
On floor under car	rbon trap F-2		0	-
				Total Vanham 380
K-1131		12-5-47		Instrument Number 158
•		•	_	49-3
Welding machine pr	roperty #148596		0	Alpha counts/min.
Welding machine pr	roperty #148596		0	
Welding machine pr	roperty #148596		0	
Welding machine pr	roperty #148596		0	<u> </u>
Welding machine pr	roperty #148596		0	•
Welding machine pr	roperty #148597		0	-
Welding machine p	roperty #148597		0	₩
Welding machine p	roperty #148597		0	<b>1</b>
Welding machine pr	roperty #148597		0	₩
Welding machine p	roperty #148597		0	•
Welding machine p	2000 ty #148589		0	<b>#</b> ·
miding meaning p	TOPOL TY TARROD		ŏ	•
Welding machine p	Tober of Arzone		ŏ	<b>#</b>
Welding machine p	LODGE CA ATMONDO		ŏ	•
Welding machine p	Toperty #140000		Ö	•
Welding machine p	Loberth Arzonas		•	

K-1131	(Cont'd.)	12-5-47	Instrument Number 158
	Welding machine property #112221	0	Alpha counts/min.
	Welding machine property #112221	0	*
	Welding machine property #112221	. 0	•
	Welding machine property #112221	0	•
	Welding machine property #112221	0	<b>\$</b>
	Welding machine property #148598	0	<b>.</b>
	Welding machine property #148598	0	₩
	Welding machine property #148598	0	• • • • • • • • • • • • • • • • • • •
	Welding machine property #148598	0	-
	Welding machine property #148598	0	
	Welding machine property #112223	0	
	Welding machine property #112223 Welding machine property #112223	Ŏ	*
	Welding machine property #112223		•
	Welding machine property #112223	. 0	₩
	Welding machine property #176530	Ö	₩
	Welding machine property #176530	0	#
	Welding machine property #176530	0	•
	Welding machine property #176530	0	•
	Welding machine property #176530	0	₩
	Welding machine property #45501	0	*
	Welding machine property #45501	0	
	Welding machine property #45501	0	**************************************
	Welding machine property #45501	0	•
	Welding machine property #45501	0	•
	Welding machine property #112227 Welding machine property #112227	0	•
	Welding machine property #112227	Ö	•
	Welding machine property #112227	Ŏ	•
	Welding machine property #112227	Ō	•
	Welding machine property #112217	Ō	•
	Welding machine property #112217	0	•
	Welding machine property #112217	0	•
	Welding machine property #112217	0	•
	Welding machine property #112217	0	•
K-301-	5 Seal Shop	12-5-47	Instrument Number 127
	Table of steel	0	Alpha counts/min.
	Table of stoel	0.	•
	Table of steel	0	•
	Table of steel	. 0-	<b>*</b>
	Table of steel	0	<u> </u>
	2 Vices	0	
	4 trash cans	0	•
	Floor	O O	•
	Floor Floor	<b>0</b> ,	•
•	Floor	0.	•
	Floor	0	•
		· ·	
		•	
	•	•	RESTRICTED
		•	·

Q.1

K-301-5 Seal Shop (Cont'd.)	12-5-47 Instrument Number	127
5 pieces of piping 1 chain hoist 1 welding table	O Alpha counts/min. O- ** O ** O- **	
2 tool cabinets	•	300
K-301-5 Seal Shop	12-5-47 Instrument Number	127
2 by 4 in shop (scrap lumber) 2 by 4 in shop (scrap lumber) 2 cabinets, front and back 3 440 volts extension cords 3 12 rubber water hose 2 110 volts extension cords Bundle of 1/2 copper tubing 3 work benches 1 bundle of gasket material 5 pieces of 6 pipes 1 welding stand all of floor space 1 welder's light shield 1 vice 1 2 chain 1 electric fan 1 piece of screen wire 4 trash containers 5 sinc buckets 5 sealed 5 gallon containers 1 machine hoist	8630 Alpha counts/min. 1990 -	

H. J. Culbert

Approved:

W. C. Hartman

JHP/nt

RESTRICTED

## CASCADE SERVICES DEPARTMENT PROCESS LABORATORY RADIATION GROUP

#### HEALTH SURVEY REPORT

Date of Issue December 18, 1947

#### DISTRIBUTION LIST

Mr. Mr. Mr. Mr. Mr. Mr.	N. A. W. N. L. D. J.	C. P. B. S. S. J. A.	Blacksher Hartman Huber Humes Jones Lieber Lisso Wahegan Warshall Preuss	Mr. M. P. Schwenn Mr. M. P. Seyfried Mr. G. T. E. Sheldon Mr. B. Speyers Mr. M. B. Stringfollow Mr. S. Vioner Mar. Mr. R. M. Williams Mr. L. C. Willson Mr. R. A. Winkel File
--	----------------------	----------------------	--	---

#### RESTRICTED

#### HEALTH SURVEY REPORT

To: Mr. G. T. E. Sheldon

Location: K-303-7

Date: December 16, 1947

12-8-47 All beta-gamma measurements on the heaters, cold traps, and reactors in the K-1301 conversion room were zero.

In the K-1305 decontamination room beta-gamma measurements on the tool table, work bench, and decontamination tanks varied from 0.000 to 0.117 and averaged 0.007 R/8 hours. The value 0.117 R/8 hours was measured on a spot on the floor at the east and of the tool table; this spot was immediately decontaminated.

12-9-47 Beta-gasma measurements on the cylinders, carbon traps, and #2 with-drawal line in K-631 varied from 0.000 to 0.007 and averaged 0.001 R/8 hours.

In K-131 beta-gamma measurements on the cylinders varied from 0.009 to 0.014 with an average of 0.012 R/8 hours.

12-10-47 In the K-1301 conversion room the beta-gamma measurements on the cold traps, heaters, and reactors were all zero.

Beta-gamma measurements on the tool table and decontamination tanks in the K-1303 decontamination room varied from 0.000 to 0.028 and averaged 0.002 R/8 hours.

12-11-47 In K-631 beta-gamma measurements on the cylinders and carbon traps were all zero.

Beta-gamma measurements on the cylinders in K-131 varied from 0.009 to 0.012 and averaged 0.010 R/8 hours.

Air samples of air-borne alpha-active dusts were as follow:

K-506-7 P.W. Station, seven feet east	12-8-47	0.0	Alpha counts/min/ft5
of withdrawal manifolds	12-9-47 12-10-47	22, 5 0.2	7 46
K-1301, inside of weighing room	12-8-47 12-10-47	0.0 0.1	<del>ព</del> ព
K-1303, decontamination room.  between tanks D & E	12-8-47 12-10-47	1.0	ដ ដ

RESTRICTED

	<b>-2</b> =		
K-1405, center of laboratory	12-8-47	0.0	Alpha counts/min/ft3
K-631, near withdrawal manifolds	12-9-47	0.0	87
	12-11-47	0.0	, <i>,</i>
K-131, center of room	12-9-47	0.1	π
K-151, south of water fountain	12-11-47	0.0	គ
K-505-10, cell 6 pump 4B seal change Old seal being removed Backplate being washed with	12-9-47	1334.0	" Vipe
trichloroethyleno		183.2	R
Metal gasket rings being seated		1.7	Ħ
K-1401, seal shop	12-10-47	0.0	n
K-312-2, cell 21 pump 1 seel change	12-9-47		
Before work was started		0.2	n
While seal being changed		1.7	<b>ca</b>
After work was completed		0.2	π
K-1004-C, Requested by Dr. W. W. Boardman	12-11-47		
Room 220, in front of hood		0.0	n
Room 220, west end of room		0.0	₩
Room 219, at front of room		0.0	**
Room 219, at rear of room		0.0	#
Room 214, at east end of room		0.0	#
Room 214, at west end of room		0.0	n
Room 206, in front of operator's		0.0	59
Room 206, in front of west belan	ce table	0.0	n
K-1004-D, Requested by Mr. H. A. Bern Room 17, in front of hood in nor	theast		
corner of room	12-11-47	0.0	n
Room 17, back of room	12 -11 -47	0.0	<b>17</b>
Room 19, southeast corner of room	12-11-47	0.0	· •
Room 19, northeast corner of	70-17-41	0.0	
room	12-11-47	0.0	n
Room 21, in front of west			_
hood Room 21, north end of tube	12-12-47	0.0	n
rack table	12-12-47	0.0	ų
Room O5, in front of hood	12-12-47	0.0	<b>4</b>
Room 05, in front of hood	12-12-47	0.1	· Ditto
K-305-6, cell 6 pump 3B seal change	12-12-47	1239.3	"



12-12-47-

12-14-47

	Carl it out
266.3	Alpha counts/min/ft3
23.9	•
1.0	•
13.0	. п
0.6	п
0.9	Ħ
	Tretrumané Number 100

Alpha surface measurements were as follow:

K-304-4, cell 2 pump 5A seal shocked 12-14-47

K-304-4, cell 2 pump 2A gasket change 12-14-47

Motal gasket rings being seated

K-801-3, cell 3 pump 1B seal change

K-SO4-4, cell 2 pump 4B seal change

Old seal being removed Backplate being washed with

trichlorosthylens

within surface measurements care is it	orrow:	
K-1301 Conversion Room	12-8-47	Instrument Number 199
Top of cold trap A	679	Alpha counts/min
Top of cold trap B	905	n
Top of cold trap C	2490	π
Top of cold trap D	30030	Ħ
Top of heater 4	4527	Ħ
Top of heater B	4527	Ħ
Top of heater 0	3622	n
Top of heater D	10920	n
On floor under reactor A	2264	n
On floor under reactor B	21840	a
On floor under reactor C	19110	Ħ
On floor under reactor D	16380	77
	. 25035	
Wipe tests:		
Top of cold trap D	1811	Ħ
Top of heater D	1584	Ħ
On floor under reactor B	453	9
On floor under reactor C	1811	π
On floor under reacter D	1811	Ħ
K-1303(Decontamination Room	12-8-47	Instrument Number 199
North side of top of tank C	3622	Alpha counts/min,
South side of top of tank C	2264	Ħ
West side of top of tank C	2943	π
East side of top of tank C	1132	π
North side of top of tank D	16380	Ħ
South side of top of tank D	13650	п
West side of top of tank D	13650	<b>ti</b> .
East side of top of tank D	6338	₩
North side of top of tank E	3622	· #
South side of top of tank E	21840	*
West side of top of tank E	4074	π
East side of top of tank E	7243	Ħ
North side of top of tank L	16380	n
South side of top of tank L	16380	ti
West side of top of tank L	. 16380	#

## K-1303 Decontamination Room (Cont'd.)

East side of top of tank L West end of tool table Center of tool table East end of tool table On floor east end of tool table North end of work bench Center of work bench	16380 1811 2037 2037 80030 2490 679	Alpha counts/min.  n  n  n  n  n  n
South end of work bench	2037 1584	u u
On floor side of work beach On floor center of room	1358	п
Wipe tests:	2037	π
North side of top of tank D	226	π
South side of top of tank D	453	Ħ
West side of top of tank D		Ħ
South side of top of tank E	1558	п
North side of top of tank L	2490	ti.
South side of top of tank L	4300	π
West side of top of tank L	1584	11
East side of top of tank L	2716	11
K-1405 Laboratory	12-8-47	Instrument Number 199
Top of south sink table	0	Alpha counts/min.
Top of south sink table	0	प्त स
Top of south sink table	0	
Top of most sink table	O	<b>17</b>
Top of west sink table	0	n
Top of west sink table	0	Π
Under hood, east wall	226	ង
Under hood, east wall	1584	π
Under hood, sast wall	0	π
	Ö	n
Under heed, east wall	. 0	n
Under hood, sast wall	Ŏ	α
Top of north sink table	Ö	Ħ
Top of north sink table	Ŏ	<b>11</b>
Top of north sink table		π
On floor	0	n
On floor	0	n
On floor	0	ti
On floor	0	
K-1405 Large Room	12-8-47	Instrument Number 199
On floor along west wall	0	Alpha counts/min,
On floor along west wall	0	π 
On floor along west wall	0	<b>u</b>
On floor along west wall	0	11
		-RESTRICTED

## K-1405 Large Room (Cont'd.)

Haran Mr Po Hoom (1977)		
On floor along south wall	0	Alpha counts/min.
On floor along south wall	0	u ,
On floor along south wall	0	Ħ
On bed of scales	0	Ħ
On floor around water tanks	Ō	<b>#</b>
On floor around water tanks	Ö.	*
On 1100r ground water tonks	Ö	n
On floor around water tanks	453	<b>41</b>
On floor near center of room	679	n
On floor near center of room	0,0	η .
On floor near center of room	Ŏ	#
On floor near center of room	0	π
On floor near north door	0	. π
On floor near north door	· · · · · · · · · · · · · · · · · · ·	Ħ
Top of work bouch	0	₩ 1
Top of work banch	0	7
Top of work banch	0	
K-631 Withdrawal Room	12-9-47	Instrument Number 199
O A A O CARA A A	453	Alpha counts/min.
On bed of scales #1	453	g g
On bad of scales #2	226	Ħ
On bed of scales #2	0	Ħ
On floor between scales 1 & 2	0	n
On floor between scales 2 & 8	0	a
On floor south and of scales #1		π
On floor south end of scales #2	0	#
On floor south and of scales #5	226	<b>1</b>
On floor under drain line #1	226	<b>R</b>
On floor under drain line #2	458	77
On floor north and of scales #1	0	 11
On floor north end of scales #2	0	7
On floor north and of scales $\#3$	0	<b>x</b>
Top of operator's desk	0	* .
K-131 Food Room	12-9-47	Instrument Number 199
Box on north end of unit A	3169	Alpha counts/min,
Box on north and of unit B	1584	n
Box on north end of unit C	2264	Ħ
Box on north and of unit D	6338	#
On floor between unit A & B	679	, <b>n</b>
On floor between unit D & C	453	
On floor between unit C & D	453	ı <b>#</b>
	226	•
Top of unit C, north and	0	₩
Top of unit C, south end	453	₩
On floor north end of unit A		π
On floor north end of unit B	453	••
On floor north end of unit C	679	~

RESTRICTED

प्र

## K-131 Feed Room (Cont'd.)

On floor north end of unit D	905 1358	Alpha counts/min
Bed of scales	226	₩
Top of operator's dosk		π
Floor west end of cylinder rack	0	•
Floor under carbon trap #1099	226	n
Floor under carbon trap #1098	226	₹
Floor under carbon trap #1098.	453	•
K-1301 Conversion Room	12-10-47	Instrument Number 199
Top of cold trap A	2264	Alpha counts/min.
Top of cold trap B	1584	7
Top of cold trap C	2490	Ħ
Top of cold trap D	32760	π
On floor under reactor A	6885	₹
On Ploor under reactor B	5432	<b>u</b>
On floor under reactor C	7696	₹
On floor under reactor D	7696	₩
Top of heater A	5885	•
	13650	#
Top of heater B	3395	*
Top of heater C	16380	
Top of heater D	1811	•
On floor between reactor A & B		स
On floor between reactor B & C	1358	Ħ
On floor between reactor C & D	1358	<b>n</b> .
Floor near east door	1137	<b>n</b>
Floor near south door	1132	n
Floor near north door	905	
K-1303 Decentamination Room	12-10-47	Instrument Number 199
Top of work table	1584	Alpha counts/min.
Top of work table	1368	Α,
	905	**
Top of work table	453	W
Top of work table	2490	Ħ
Top of tool banch	1811	n
Top of tool bench	1132	<b>*</b>
Top of tool bench	1358	. π
Top of tool bench	· ·	
Floor front of work table	3622	
Floor front of work table	1811	
Floor front of telephone	905	<u> </u>
Floor under vice	103740	<u>.</u>
Floor under vice	13650	, , , , , , , , , , , , , , , , , , ,
Floor front of tool beach	3169	·
Floor front of tool bench	2264	<b>n</b>
Floor end of work bench	1132	<b>4</b>
Top of tank L	13650	. <b>₩</b>
Top of tank L	16380	· <b>n</b>
Top of tank L	21840	n
avp ve veen -		

On seals

On seals

On seals

On seals

### K-1303 Decontamination Room (Cont'd.)

Top of tank E	4527	Alpha counts/min;
Top of tank E	3395	n
Top of tank E	7243	Ħ
Top of tank E	6790	Ħ
Top of tank D	16380	Ħ
Top of tank D	13650	ч
Top of tank D	10920	n
Top of tank D	8600	Ħ
Floor side of tank L	2490	n
Floor side of tank L	1811	Ħ
Floor side of tank L	1811	*
Floor side of tank D	4527	n
Floor side of tank D	7922	ग
Floor side of tank D	10920	u.
Floor side of water tank	3169	π
Top of tank C	2264	π
Top of tank C	2490	Ħ
Top of tank C	5169	n
Top of tank C	2264	n
Floor side of tank C	1132	Ħ
K-1401 Seal, Shop	12-10-47	Instrument Number 199
Top of north work bench	226	Alpha counts/min .
Top of north work bench	<b>226</b> <sup>7</sup>	<b>#</b>
Top of north work bench	0	•
Top of north work beach	O'	***
Top of south work bench	0	n
Top of south work bench	O	4
Top of south work bench	0	***
Top of center work bench	0'	<b>11</b>
Top of center work bench	0	π
Top of center work bench	. <b>Q</b> /	<b>4</b>
Top of center work bench	0	<b>n</b>
On seals	1811	<b>*</b>
On seals	1584	**
On seals	905	n

1358

1358/

1811

0

0 /

K-131 Feed Room	12-11-47	Instrument Number 199
Box end of unit A	7017	Alpha counts/min.
Box end of unit B	3622	Ħ
Box and of unit C	<b>31</b> 69	77
Box end of unit D	4753	19 .
Top of unit A	4980	<b>11</b>
Top of unit B	0	•
Top of unit C	0	#
Top of unit D	905	η
On floor box end of unit A	<b>67</b> 9	ti
On floor box and of unit B	905	₩
On floor box end of unit C	1132	π .
On floor box end of unit D	2037	4
On floor between unit A & B	226	<b>11</b>
On floor between unit B & C	453	<b>n</b>
On floor between unit C & D	453	n
On floor under carbon trap F-1	226	# <b>#</b>
On floor under carbon trap F-2	226	π
K-631 Withdrawal Room	12-11-47	Instrument Number 199
On scales #1	0	Alpha counts/min.
On scales #2	0	<b>n</b>
On scales #5	453	•
Or floor between scales #1 & #	<b>12</b> 0	
On floor between scales #2 & #		
On floor under drain line #1	0	# ·
On floor under drain line #2	226	 ध
On floor south east corner of		**
On floor north west corner of	room 0	₹
On floor center of room	U	
K-631 Carbon Trap Room	12 -11 -47	Instrument Number 199
On floor botween large traps	0	Alpha counts/min -
On floor under seal exhaust to	rap <b>22</b> 6	*
On floor side of trap #T-207	0	<b>Ħ</b>
On floor side of trap #T-212	0	<b>#</b>
On floor side of trap #T-210	0	<b>n</b>
On scales	453	•
K-1004-C, Room 220	12-11-47	Instrument Number 199
Under hood, south wall	0	Alpha counts/min.
Under hood, south wall	0	<b>#</b>
Under hood, south wall	0	<b>π</b> 
Under hood, south wall	0	<b>n</b>
Top of work bench, east wall	0	
Top of work bench, east wall	0	· •
Top of work bench, east well	0	Ħ

•	-9 <b>-</b>		
•			
K-1004-C, Room 220 (Cont'd.)			
N-2002-07 NOOM		_	Na aliana a manda na fanda na
Top of work bench, north wall	•	0	Alpha counts/min.
Top of work beach, north wall		0 `	11
Top of work banch, north wall		0	η
Top of table center of room		0	 11
Top of table center of room		0	·
Top of table center of room		0	11
Top of those contor of form		0	<b>n</b>
Around on Mercury Stand		0	ង
Around on Moreury Stand		0	Ħ
Around on Mercury Stand		0	Ħ
On floor	•	Ō	म
On floor		Ö	Ħ
On floor		Ŏ	Ħ
On floor		U	•
· ·			Instrument Humber 199
K-1004-C, Room 219	12-11-47		III di telono mamoo.
•		•	Alpha counts/min.
On floor		0	Hibus apsuealmin.
On floor		. 0	п
On floor		0	**************************************
On floor		0	
On floor		0	7
On top edge of sink		, <b>O</b>	<b>n</b>
On top edge of sink		0	**
On top edge of sink		0	" •
On top edge of sink		0	# 9
On table against south wall		0	
On table against south wall		0	<b>π</b>
On table against south wall		0	<b>H</b>
On table against south wall		0	n
On table against south wall		0	<b>प्र</b>
Top of operator's desk		0	TI TI
Top of operator's deak		0	. 11
Top of operator's desk		0	n
On east panel board		Ö	79
On east panel board		Ö	Ħ
On west panel board		Ö	ń
On west panel board		•	•
	10 77-47		Instrument Jumber 139
K-1004-C, Room 214	12-11-47		242042 4414-14
		O	Alpha courts/min
Top of table, north wall		0	Habur comitty man
Top of table, north wall		Ö	π
ron of table, north wall	_		<b>9</b>
small table, north east corner	of room	226	•
Small table, north east corner	or Loom	226	18
Small table, north east corner	OL LOCK	0	
race of eigh north east corner	or room	0	<b>q</b>
Edge of sink north east corner	of room	0	
Top of vice table		0	
Top of vice table		0	**
IND OF AND GRAND			

K-1004-C, Room 214 (Cont'd.)			
Top of table, south wall		0	Alpha counts/min
Top of table, south wall		0	π
On floor near north sast corner	;	3622	π
On floor near north east corner		1358	Ħ
On floor near north east corner	,	0	π
On floor front of sink		Ö	n
On floor front of sink		Õ	n
On floor near south wall		Ö	•
On floor near south wall		Ö	n
		0 .	<b>*</b>
On floor near south wall			
K-1004-C, Room 206	12-11-47		Instrument Number 199
Top of south wall balance table		0	Alpha counts/min.
Top of south wall belance table		Ö	7
Top of south wall balance table		Ö	Ħ
Front of cabinst, south wall		Ö	n
Front of cabinet, south wall		Ö	. <b>n</b>
		Ö	#1
Front of cabinet, south wall		Ö	ŧţ
On table against north wall		0	Ħ
On table against north wall		0	n
On table against west wall			<b>u</b>
On table against west wall		0	<b>t</b>
Top of operator's desk		0	7
Operator's chair		0	
On floor		0	<b>n</b> .
On floor		0	 1
On floor		0	u
On floor		0	q.
On floor		0	~
K-1004-D, Room 17	12-11-47		Instrument Number 199
Inside hood, north west corner	of room	0	Alpha counts/min #
Inside hood, north west corner		Đ	Ħ
Inside hood, north west corner		Ö	π
Top of bonch, against west wall		Ö	π
Top of bench, against west wall		Ö	n
Top of beach against west wall	1	Ö	Ħ
Top of bench, against west wall		Õ	•
Top of bench, against west wall		. 0	Ħ
Top of bench, against west wall	•	226	n
Top of table, front of room		226	π
Top of table, front of room		226 0	#
Top of table, front of room		-	n
On floor along west wall		0	Ħ
On floor along west wall		0	n
On floor along west wall		0 ~	<b>H</b>
On floor front of cabinets		0.	
	•		RESTRICTED

K-1004-D. Room	17	(Cont 'd.	)
----------------	----	-----------	---

Top of bench against east wall Top of bench against east wall Top of bench against east wall Top of bench against east wall

Inside of east hood Inside of east hood Inside of east hood

On floor front of cabinets		0	Alpha counts/mir.
On floor front of cabinets		0	n
On floor near center of room		0	n
On floor near center of room		0	Ħ
On floor near center of room		0	<b>.</b> . <b>11</b>
K-1004-D, Room 19	12-11-47		Instrument Humber 199
Under hood, north east corner of	noom	679	Alpha counts/min.
Under hood, north east corner of	room	455	. 9
Under hood, north east corner of	Local	0	n
. Under hood, north east corner of	room	226	. <b>tt</b>
Top of spectrograph table		0	Ħ
Top of spectrograph table		0	Ħ
Top of spectrograph table		O	Ħ
Top of spectrograph table		0	ŋ
Top of spectrograph table		0	. "
Top of sink bench		0	4
Top of sink banch		0	*
Top of sink bench		. 0	п
Top of sink bench		0	# _
Top of south table		0	₩ .
Top of south table	•	0	4
Top of south table		Ö	Ħ
Top of balance table		0	Ħ
Top of balance table	•	Ö	· #
Top of balance table		Ö	•
East ond of spectrograph table		3622	<b>. a</b>
East end of spectrograph table		4980	
EFF. 610 of pheoding abu grans			
K-1004-D, Room 21	12-12-47	•	Instrument Number 199
Under west hood		0	Alpha counts/min.
Under west hood		0	ti 11
On table top, south of hood		226	₩ •
On table top, south of hood		0 .	u 
On table top, south of hood		0	* ·
On floor west of heed		0	<b>u</b>
On floor west of hood		0	
Bottom of operator's shoes		0	n
- Top of tube rack table		0	. 1
Top of tube rack table		0	<b>₹</b> .
Top of tube rack table		0	<b>\</b>
Don of house and use and well		0	R

RESTRICTED 22

K-1004-D, Room 05	12-12-47	Instrument Number 199
Top of vice table	0	Alpha counts/min.
Top of vice table	0	<b>H</b>
Top of vice table	0	α
On floor around vice table	0	<b>1</b>
On floor around vice table	0	π
On floor around vice table	0	Ħ
Inside hood	Ô	π
Inside hood	0	#
Inside hood	0	· •
Top of tube rack stand	0	n
Top of tube rack stand	0	•
Top of tube rack stand	. 0	*
K-301-3 Seal Change - Cell 3 pump 1B	12-12-47	Instrument Number 199
On old seal	1584	Alpha counts/min.
On old seal	<b>905</b> 7	Ħ
Right rubber glove	7017 /	<b>*</b>
Left rubber glove	7245	*
Mechanic's leather gloves	0	₩
Mechanic's leather gloves	0/	Ħ .
Rubber gloves	0	₩ 1
Tools that were used	0/	₩ .
Tools that were used	0	•
Tools that were used	0′	*
Tools that were used	0	*
Load Rocker (Bearing)	0/	*
Load Rocker (Bearing)	0	•
Load Rocker (Bearing)	. 0.	<b>t</b>
Load Rocker (Bearing)	0	•
On floor around pump	0.	•
On floor around pump	0	#
On floor around pump	0,	*
On floor around pump	0	•
On floor around pump	0 ·	Ħ

H.J. Culhet

H. J. Culbert

W. C. Hartman

JHP/nf

# CASCADE SERVICES DEPARTMENT PREOCESS LABORATORY RADIATION SURVEY

#### HEALTH SURVEY REPORT

Date of Issue December 2, 1947

#### DISTRIBUTION LIST

Mr. W. C. Hartman
Mr. A. P. Huber
Mr. W. B. Humes
Mr. M. S. Lisso
Mr. J. A. Warshall
Mr. H. M. Preuss
Mr. M. F. Schwenn

Mr. M. P. Seyfried
Mr. G. T. E. Sheldon
Mr. B. Speyers
Mr. S. Visner
Mr. L. C. Willson
Mr. R. A. Winkel
File

RESTRICTED.

#### HEALTH SURVEY REPORT

To: Mr. G. T. E. Sheldon Location K-303-7

Date: December 2, 1947

11-24-47 In the K-1303 decontamination room beta-gamma determinations on the work bench, tool table and decontamination tanks varied from 0.000 to 0.014 and averaged 0.002 R/8 hours.

All beta-gamma determinations on the heaters, reactors, and cold traps in the K-1301 conversion room were zero.

Beta-gamma determinations on the carbon traps and vaporisers were all zero in K-151, and the determinations on the cylinders varied from 0.007 to 0.012 with an average of 0.010 R/8 hours.

All beta-gamma determinations on the cylinders in K-631 were zero.

11-25-47 In the K-1501 conversion room the beta-gamma determinations on the reactors, heaters and cold traps were all zero.

Beta-gamma determinations on the work bench, tool table, and decontamination tanks in the K-1303 decontamination room varied from 0.000 to 0.017 averaging 0.003 R/8 hours.

Air samples of air-borne alpha-active dust were as follow:

K-306-7 P.W. Station, seven feet	11-24-47	0.1	Alpha counts/min/ft3
east of withdrawal manifolds	11-25-47	0.1	•
• • • • • • • • • • • • • • • • • • • •	11-26-47	0.2	W
	11-27-47	0.1	**
	11-28-47	0.4	, "
K-631 near withdrawal manifolds	11-25-47	0.0	•
K-131 near center of room	11-25-47	0.2	<b>19</b>
K-1301 inside of transfer room	11-25-47	0.1	•
K-1501 inside of weighing room	11-26-47	0.0	w



K-1303 decontamination room between tanks A & E	11 <b>-</b> 25 <b>-4</b> 7 11 <b>-</b> 26 <b>-4</b> 7	0.0 0.1	Alpha counts/min/et3
K-1401 seal shop	11-26-47	0.0	Ħ
K-1405 center of large room	11-26-47	0.0	. 7
F-1405 contex of leboratory	11-26-47	3.2	<u> </u>

H. J. Cullet

H. J. Culbert

Approved:

W. C. Hartman

JHP/nf

#### CASCADE SERVICES DEPARTMENT

#### PROCESS LABORATORY

RADIATION SURVEY

#### HEALTH SURVEY REPORT

Date of Issue November 24, 1947

#### DISTRIBUTION LIST

Mr. S. C. Barnett

Dr. C. K. Beck

Dr. M. J. Costello

Mr. W. C. Hartman

Mr. A. P. Huber

Mr. W. B. Humes

Mr. M. S. Lisso

Mr. J. A. Marshall

Mr. H. H. Prouss

Mr. M. F. Sohwenn

Mr. M. P. Soyfried

Mr. G. T. E. Sheldon

Mr. B. Speyers

Mr. S. Visner

Mr. L. C. Willson

Mr. R. A. Winkel

Mr. J. C. Worthington

Pile

#### HEALTH SURVEY REPORT

To: Mr. G. T. E. Sheldon
Location: K-303-7

Date: November 24, 1947

11-17-47 In the K-1301 conversion room beta-gamma measurements on the cold traps, reactors, and heaters were all zero.

In the K-1303 decontamination room beta-gamma measurements on the work bench, tool table, and decontamination tanks varied from 0.000 to 0.010 and average 0.002 R/8 hours.

11-18-47 In K-131 beta-gamma measurements on the carbon traps were zero, and those on the cylinders varied from 0.007 to 0.012 with an average of 0.010 R/8 hours.

In K-631 beta-gamma measurements on the cylinders and carbon traps were all zero.

11-19-47 Beta-gammu measurements on the work bench, tool table, and decontamination tanks in the K-1803 decontamination room varied from 0.000 to 0.014 with an average of 0.003 R/8 hours.

Beta-garma measurements on the cold traps, heaters and reactors in the K-1301 conversion room were all sero.

11-20-47 All beta-gamma measurements on the cylinders and carbon traps in K-631 were zero.

The beta-gamma measurements on the cylinders in K-131 varied from 0.007 to 0.014 averaging 0.010 R/8 hours.

Air samples of air-borne alpha-active dusts were as follow:

K-806-7	P.W. Station, seven	11-17-47	0.1	Alpha counts/m	in/ft <sup>3</sup>
	feet east of withdrawal	11-18-47	6.2		
	manifolds	11-19-47	0.3	Ħ	. (.
		11-20-47	0.1	n	
		11-21-47	0.1	77	
K-1301.	inside of weighing	11-17-47	0.0	n	
_	room door	11-19-47	0.2	n	
		11-20-47	0.0	n	
K-1303.	Decontamination room	11-17-47	0.1	Ħ	
	between tanks A & E	11-19-47	0.1	n	
	•	11-20-47	0.0	п	
K-1405,	center of laboratory	11-17-47	0.1	. "	
K-631,	near withdrawal manifolds	11-18-47	0.0	π	
					^

H. J. Culbert

W. C. Hartman

#### CASCADE SERVICES DEPARTMENT

#### PROCESS LABORATORY

#### RADIATION SURVEY

#### HEALTH SURVEY REPORT

Date of Issue November 19, 1947

#### DISTRIBUTION LIST

Mr. L. G. Bamer Mr. S. C. Barnett Dr. C. K. Book Dr. H. J. Costello

Mr. W. C. Hartman

Mr. A. P. Huber

Mr. W. B. Humes

Mr. M. S. Misso

Mr. J. A. Marshall

Mr. H. H. Prouss

Mr. M. F. Schwenn

Mr. M. P. Seyfried

Mr. G. T. E. Sheldon

Mr. B. Speyers

Mr. S. Vianer

Mr. L. C. Willson

Mr. R. A. Winkel

File

CONTROL OF THE PARTY OF THE PARTY.

#### HEALTH SURVEY REPORT

To: Mr. G. T. E. Sheldon Location: K-303-7

Date: November 19, 1947

11-10-47 Beta-gamma determinations on the heaters, reactors, and cold traps in the K-1301 conversion room were all zero.

Beta-gamma determinations on the work bench, tool table, and decontamination tanks in the K-1303 decontamination room varied from 0.000 to 0.016 and averaged 0.003 R/8 hours.

11-11-47 All beta-gamma determinations on the cylinders and carbon traps in K-631 were zero.

In K-151 beta-gemma determinations on the cylinders varied from 0.012 to 0.017 with an average of 0.014 R/8 hours.

11-12-47 All beta-gamma determinations on the reactors, heaters, and cold traps in the K-1301 conversion room were zero.

In the K-1303 decontamination room beta-gamma determinations on the work bench, tool table, and decontamination tanks varied from 0.000 to 0.028 with an average of 0.006 R/8 hours.

11-13-47 Beta-gamma determinations on the cylinders and carbon traps in K-631 were all zero.

Beta-gamma determinations on the cylinders in K-131 varied from 0.010 to 0.017 and averaged 0.013 R/8 hours.

Air samples of air-borne alpha-active dusts were as follow:

K-306-7	P.W. Station, seven	11-10-47	0.5	Alpha counts/min/ft3
	feet east of withdrawal	11-11-47	0.6	- #
	manifolds	11-12-47	Ò.2	Ħ
		11-13-47	0.9	Ħ
	•	11-14-47	0.1	#
K-1301,	conversion room between			
	reactors C & D	11-10-47	0.1	H
K-1301,	inside of weighing room			
	door	11-12-47	2.3	¥
K-1303,	decontamination room,	11-10-47	0.2	П
	between tanks A & E	11-12-47	1.6	<b>#</b>
				2

K-1405, center of downstairs room	11-10-47	0.1	Alpha counts/min/ft8
K-1405, center of laboratory	11-10-47	0.0	n
K-1401, seal shop, between tables	11-12-47	0.0	<b>n</b>
K-651, near withdrawal manifolds	11-11-47 11-13-47	0.0 0.0	n n
K-131, between baths A & B	11-11-47 11-13-47	0.1	N 11

H. J. William

H. J. Culbert

Approved:

W. C. Hartman

HJC/nf

Closey

#### RESTRICTED

#### CASCADE SERVICES DEPARTMENT

PROCESS LABORATORY

RADIATION SURVEY

#### HEALTH SURVEY REPORT

Date of Issue November 12, 1947

#### DISTRIBUTION LIST

Mr. L. G. Bamer
Mr. S. C. Barnett
Dr. C. K. Beck
Dr. M. J. Costello
Mr. W. C. Hartman
Mr. A. P. Huber
Mr. W. B. Humes
Mr. M. S. Lisso
Mr. J. A. Marshall

Mr. H. M. Preuss
Mr. M. P. Schwenn
Mr. M. P. Seyfried
Mr. G. T. E. Sheldon
Mr. B. Speyers
Mr. S. Visner
Mr. L. C. Willson
Mr. R. A. Winkel
File

#### HEALTH SURVEY REPORT

To: Mr. G. T. E. Sheldon Date: November 11, 1947 Location: K-505-7

11-5-47 In the K-1301 conversion room beta-gamma measurements on the cold traps, heaters, and reactors were all zero.

In the K-1303 decontamination room beta-gamma measurements on the tool table and decontamination tanks varied from 0.000 to 0.010 and averaged 0.002 R/8 hours.

11-4-47 Beta-gamma measurements on the cylinders and carbon traps in K-631 were all zero.

Beta-gamma measurements on the cylinders in K-131 varied from 0.007 to 0.021 with an average of 0.015 R/8 hours.

11-5-47 Beta-gamma measurements on the cold traps, heaters, and reactors in the K-1501 conversion room were all zero.

In the K-1303 decontamination room beta-gamma measurements on the work bench, tool table, and decontamination tanks varied from 0.000 to 0.010 and averaged 0.002 R/8 hours.

Air samples of air-borne alpha-active dust were as follows:

K-306-7 P.W. Station, seven feet	11-8-47	0.1	Alpha counts/min/ft5
east of withdrawal manifolds	11-4-47	0.0	#
•	11-5-47	0.2	¥
	11-6-47	0.1	•
·	11-7-47	0.2	•
K-1301 outside of weighing room			
door	11-8-47	0.0	•
K-1801 conversion room between			
reactors B & C	11-5-47	0.5	•
X-1303 decentamination room,	11-5-47	0.0	9
between tanks A & E	11-5-47	15.9	*
K-1405 laboratory	11-3-47	0.1	**
K-1405 downstairs room	11-3-47	0.0	#
K-1401 seal shop	11-5-47	9.0	•
K-631 near withdrawal manifolds	11-4-47	0.1	π
K-151 six feet from water fountain	11-4-47	0.1	Ħ

K-1004-D Requested by Mr. H. A. Bernhardt	11-8-47		
Room 17, northwest corner of room		0.0	Alpha counts/min/ft5
Room 17, northeast corner of room		0.0	•
Room 19, at front of hood in northeast	i		*
corner of room		0.1	
Room 19, near furnace in northwest		0.1	•
corner of room Room 21, at north end of vacuum bench		0.1	*
Room 21, at front of hood		0.0	<b>4</b>
Room 05, at front of hood		0.0	9
Room OS, near windows		0.1	₩
	33 A 49		•
R-1004-C	11-4-47		
Requested by Dr. W. H. Boardman			
Room 220, at front of hood		0.0	•
Room 220, at front of furnace in south	heast		•
corner of room		0.0	**************************************
Room 219, between spectrometers U & T		0.0	 <b>17</b>
Room 219, south side of room		0.0	*
Room 214, in front of conversion syst	em	0.1	•
Room 214, in northeast corner of room Room 206, center of room	•	0.1	ŋ
MOOM 200, CAMEAR OF 100m			
K-810-8 Cell Floor	10-25-47		
Reside cell 7 pump 1B		0.0	<b>11</b>
Beside cell 4 pump 4B		0.0	<b>A1</b>
• •			
K-810-2 Gell Floor	10-23-47		
Beside cell 1 pump 5B		0.0	<b>9</b>
Beside cell 8 pump 5A	•	0.0	,
K-310-1 Cell Floor	10-23-47	•	
		0.1	94
Beside cell 5 pump 2A	•	0.0	
Beside cell 4 pump 4B			
K-309-8 Cell Floor	10-23-47		
	-	~ ~	. •
Beside cell 5 pump 2A		0.0 0.1	<b>~</b>
Beside cell 4 pump 5A		0.2	•
K-309-2 Cell Floor	10-24-47		
- AA		0.0	a a
Beside cell 2 pump 6B		0.0	
Beside cell 5 pump 5A			
			RESTRICTED

-R-E	5 T R	IC	T	E.	I_
					_
					,

K-509-1 Ceil Floor	10-24-47	
Beside cell 5 pump 5B Beside cell 2 pump 5A	0. 0.	O Alpha counts/min/ft5
K-501-1 Cell Floor	10-24-47	
Beside cell 4 pump 6B	0 o	
Beside cell 8 pump 2B  K-501-2 Cell Floor	10-24-47	
Beside cell 7 pump 2A	0.	o •
Beside cell 4 pump 4B	0.	•
K-501-5 Coll Floor	10-24-47	
Beside cell 6 pump 6A Beside cell 7 pump 5A	0. 0.	
K-301-4 Cell Floor	10-24-47	
Beside cell 5 pump 3B Beside cell 2 pump 6B	0. 0.	·
K-301-5 Cell Floor	10-24-47	
Beside cell 1 pump 4B Beside cell 6 pump 6A	0. 0.	
K-808-1 Cell Floor	10-24-47	
Beside cell 8 pump 2B Beside cell 3 pump 1B	0. 0.	
K-802-2 Cell Ploor	10-24-47	
Beside cell 1 pump 6A Beside cell 10 pump 6B	0.	
K-302-3 Cell Floor	10-23-47	•
Beside cell 2 pump 5A Beside cell 4 pump 5A	. 0d	
K-302-5 Cell Floor	10-23-47	
Beside cell 10 pump 6A Beside cell 1 pump 2A	0. 0.	

K-505-1 Cell Floor	10-23-47		
Beside cell 2 pump 5A Beside cell 8 pump 5A		0.1 0.0	Alpha counts/min/ft8
K-505-2 Cell Floor	10-23-47		
Beside cell 8 pump 2A Beside cell 2 pump 2A		0.0	<b>1</b> 1
K-305-8 Cell Floor-	10-23-47		
Beside cell 1 pump 5A Beside cell 7 pump 5A		0.0	**
K-808-4 Cell Floor	10-23-47		
Beside cell 2 pump 2A Beside cell 8 pump 5B		0.0	. <b>1</b>
K-503-6 Gell Floor	10-23-47		
Beside cell 10 pump 6A Beside cell 1 pump 1B		0.1 0.1	11 18
K-505-6 Cell Floor	10-23-47		
Beside cell 2 pump 5A Beside cell 5 pump 2A		0.1 0.1	
K-305-7 Cell Floor	10-25-47		
Beside cell 2 pump 6B Beside cell 6 pump 4B		0.1 0.0	**
K-305-8 Cell Floor	10-23-47		
Beside cell 2 between pumps 5B & 6A Beside cell 8 pump 5A		0.1 0.2	# #
K-505-10 Pipe Gallery	10-25-47		
Beside B inlet valve cell 4 Beside B outlet valve cell 7	·	0.1 0.0	*
K-803-9 Pipe Gallery	10-23-47		- 2-
Beside B bypass valve cell 8 Beside B inlet valve cell 1	,	0.0 0.1	₩

K-505-8 Pipe Gallery	10-28-47		
Beside B inlet valve cell 4 Beside B outlet valve cell 7		0.0 0.0	Alpha counts/min/ft5
K-803-7 Pipe Gallery	10-24-47		•
Top of housing at A bypass valve cell On catwalk at B inlet valve cell 8	. 1	0.0 0.0	n n
K-S03-6 Pipe Gallery	10-24-47	• •	
On catwalk at A inlet valve cell 10 Top of housing at B inlet valve cell	8	0.1 0.0	<b>π</b> π
K-303-5 Pipe Gallery	10-24-47		
On catwalk at A outlet valve cell 4 Top of housing at B inlet valve cell	7	0.0	
K-305-4 Pipe Gallery	10-27-47		
Top of housing at B outlet valve cell On catualk at B bypass valve cell 9	4	0.0 0.1	<b>17</b>
K-S05-5 Pipe Gallery	10-27-47		
Top of housing at A outlet valve cell On catwalk at B inverse recycle valve		0.1	# #
K-303-2 Pipe Callery			
In service gallery at stair door Top of housing at A inlet valve cell	5	0.0 0.0	<b>4</b>
K-505-1 Pipe Gallery	10-27-47		
On catualk at B inlet valve cell & Top of housing at A inlet valve cell :	5	0.0	<b>m</b>
K-802-5 Pipe Gallery	10-27-47		
Beside B cutlet walve cell 9 On catwalk over maintenance shop		0.0 0.0	# #

K-802-5 Pipe Gallery	10-24-47		
Beside B inlet valve cell 1 Beside B inlet valve cell 7		0.1 0.1	Alpha counts/min/ft3
K-302-2 Pipe Gallery	10-27-47		
Top of housing at A inverse recycle to	valve		_
On catwalk at A cutlet valve cell 5		0.0 0.1	*
K-302-1 Pipe Gallery	10-27-47	•	
On catwalk at cell 7 & 8 coolant			
pump pit door Top of housing at B outlet valve cell	. 4	0.0	<del>8</del>
K-S01-5 Pipe Gallery	10-27-47		
Top of housing at A inlet valve cell	8	0.0	n
On catwalk at C-216 evacuation valve	cell 5	0.0	. •
X-301-4 Pipe Gallery	10-27-47		
On catealk at B inverse recycle valve Top of housing at B inlet valve cell	cell 7 2	0°0	N N
K-301-5 Pipe Gallery	10-27-47		
Service gallery at stair door Top of housing at A inlet valve cell	5	0.0 0.0	# #
K-301-2 Pipe Gallery	10-27-47		
On catwalk at A cutlet valve cell 8 Top of housing at A bypass valve cell	1	0.0	u u
K-501-1 Pipe Gallery	10-27-47		
Top of housing at A inlet valve cell : On catwalk at C-216 evacuation valve	8 3011 7	0.0 0.1	11 18
K-809-1 Pipe Gallery	10-27-47	0.1	•
Top of housing at B inverse recycle ve		0.0	a
On catwalk at B inlet valve cell 1	AATT G	0.0	 ₩
E-509-2 Pipe Gallery	10-27-47		,
Top of housing at A outlet valve cell Beside A inlet valve cell 1	6	0.0 0.0	**

K-509-5 Pipe Callory	10-28-47		
On catualk over maintenance shop Top of housing at B bypass valve cel	1 5	0.0 0.0	Alpha counts/min/ft3
K-510-1 Pipe Gallery	10-28-47	•	
On catwalk at A inlet valve cell 6 Top of housing at A cutlet valve cell	11	0.0 0.0	19 11
K-510-2 Pipe Gallery	10-28-47	•	
Top of housing at A inlet valve cell On catwalk at B inverse recycle valve	2 6 cell 7	0.0	n n
X-810-8 Pipe Gallery	10-28-47		
Top of housing at B bypass valve cell on catwalk at B outlet valve cell 1	l 6	0.0	# 11
K-311-1 Pipe Callery	10-28-47		•
On catwalk at C-216 evacuation valve Top of housing at A outlet valve cell	cell 2 1 10	0.0 0.0	N N
K-402-1 Operating Floor	10-28-47		
Above B normal building inlet valve Inside of line recorder station between	en	0.0	*
tube racks A & B At stair side of cells 7 & 8 ccolent	pumps	0.0 0.0	*
I-402-2 Operating Floor	10-28-47		
Above B inlet valve cell 10 Inside of lins recorder station at		0.0	प
manifold rough pump Above A outlet valve cell 2		0.0	₩ . #
K-402-8 Operating Floor	10-28-47		
Above A spare building bypass valve Inside of line recorder station at		0.0	
tube rack A At Kinney pump SV-5		0.1 0.1	<del>য়</del> ধ্য
K-402-4 Operating Floor	10-28-47		
At cell 9 coolant pump Inside of line recorder station at		0.0	*
sample manifold Above B outlet valve cell 1		0.0 0.0	w #

K-402-5 Operating Floor	10-28-47		
At cells 1 & 2 coolant pumps Inside of line recorder station at		0.0	Alpha counts/min/ft3
sample manifold pump At carbon trap S-2		0.0	<b>R</b>
we contain that the		0.0	π
E-402-6 Operating Floor	10-29-47		
Above B inlet valve cell 2		0.0	'n
Inside of line recorder station at tube rack A		0.1	*
( · ····		.,	
K-402-7 Operating Floor	10-29-47		
Above B bypacs valve cell 7 Inside of line recorder station at		0.1	Ħ
manifold rough pump	•	0.1	
At cells 1 & 2 coolant pumps	•	0.1	**
K-402-8 Operating Floor	10-29-47		
Above A & B building inverse recycle Inside of line recorder station at	valves	0.0	. <b>11</b>
sample manifold		0.0	<b>t</b> t
At Kinney pump SV-3		0.0	•
K-402-9 Operating Floor	10-29-47		
At cells 9 & 10 coclant pumps Inside of line recorder station between	en.	0.0	•
tube racks A & B		0-1	<b>\tau</b>
Above A normal building outlet valve		0.1	#
K-402-1 Cell Floor	10-80-47		
Beside cell 1 between pumps 4A & 5B		0.1	₩.
Beside cell 10 pump 5A		0.1	<b>#</b>
K-402-2 Cell Floor	10-30-47		
Beside cell 4 pump 6B		0.0	n
Beside cell 7 between pumps 2A & 3B		0.1	n
K-402-8 Cell Floor	10-29-47		
Beside cell 9 between pumps 2A & SB		0.0	n
Beside cell 5 pump 1A		0.0	Ħ
K-402-4 Cell Floor	10-29-47		
Beside cell 2 pump 2A		0.0	*
Beside cell 8 between pumps 4B & 5A		0.0	#

 	and the state of t	<b>n</b>		,
		9		
}	K-402-6 Cell Floor	10-29-47		
	Beside cell 10 pump 5B Beside cell 3 pump 5A		0.1 0.0	Alpha counts/min/ft3
2	C-402-7 Cell Floor	10-29-47		
	Beside cell 4 pump 2A Beside cell 7 pump 2B		0.0 0.0	n n
1	K-402-8 Cell Floor	10-29-47		
	Beside cell 6 pump 1B Beside cell 1 pump 6B		0.0 0.0	<b>4</b>
I	C-402-9 Cell Floor	10-29-47		
	Beside cell 4 pump 5A Beside cell 9 pump 1A		0.0 0.1	<b>11</b>
X	-402-1 Pipe Gallery	10-30-47		
	On catwalk at upper evacuation valve Top of housing at A inlet valve cell		0.1 0.0	# #
K	-402-2 Pipe Gallery	10-50-47		
	Top of housing at B bypass valve cell Cn catualk at B inlet valve cell 2.	l 9	0.1 0.0	<b>u</b>
X	-402-5 Pipe Gallery	10-50-47		
	Top of housing at A inlet valve cell On catwalk at B inverse recycle valve		0.0 0.1	•
K	-402-4 Pipe Gallery	10-50-47		
	Top of housing at A inlet valve cell Service gallery at feed filter	7	0.1 0.1	11 11
K	-402-6 Pipe Gallery	10-50-47		
	Top of housing at A normal building outlet valve On catwalk at A outlet valve cell 8		0.0	# #

R	E	S	T	R	I	C	T	B	D	
-		_		_	-		-			

-10-

K-402-7 Pipe Gallery

10-30-47

Top of housing at B inlet valve cell 8 On catwalk at evacuation valve cell 2		O Alpha o 1	counts/min/ft3
K-402-8 Pipe Gallery	10-50-47		
Top of housing at A inlet valve cell to Concetwalk at B inverse recycle valve		=	65 46
K-402-9 Pipe Gallery	10-80-47		
On catwalk at cells 7 & 8 coolant pump Top of housing at B outlet valve cell		-	₩ <b>%</b>

Note: For all samples taken on the cell floor and on the operating floor the inlet of the sampling instrument was 2 feet above the floor.

For all samples taken in the pipe gallery the inlet of the sampling instrument was 2 feet above the catwalk or the insulation on the pipes.

H. J. Culbert

Approved:

W. C. Hartman

JHP/nf

#### CASCATE SERVICES DEPARTMENT

#### PROCESS LABORATORY

#### RADIATION SURVEY

#### HEALTH SURVEY REPORT

Date of Issue

November 5, 1947

#### DISTRIBUTION LIST

Mr. L. G. Bamor

Mr. S. C. Barnett

Dr. C. K. Back

Dr. M. J. Costollo

Hr. W. C. Hartman

Mr. A. P. Huber

Mr. W. B. Eumos

₩. M. S. Licco

Mr. J. A. Marshall

Mr. H. M. Prouss

Mr. M. F. Schwenn

Mr. M. P. Seyfriod

Mr. G. T. E. Sheldon

Mr. B. Speyers

Mr. S. Visner

Mr. L. C. Willson

Mr. R. A. Winkel

Filo

#### HEALTH SURVEY REPORT

Ic: Mr. G. T. H. Sholden

Socation: X-303-7

Date: November 4, 1947

RESTRICTED

10-28-17 In the N-1301 conversion room beta-gamma determinations on the heaters, cold traps, and reactors were all zero.

In X-1212 in a check on six (6) diffusion pumps all beta-gamma determinations were zero.

10-00-17 Beta-gamma dotorminetions on the cylinders in K-631 were all zero.

Beta-gamma determinations on the cylinders in K-131 varied from 0.007 to 0.010 and averaged 0.009 R/8 hours.

Air samples of air-borne alpha-motive dust were as follows:

K-306-7 F.W. Station, seven cast of withdrawal manifolds	10-27-47 10-28-47 10-29-47 10-50-47 10-51-47	0.1 A: 0.1 0.7 0.1 0.5	lpha counts/min/ft3
I-1801 cubbide of troughing room door	10-29-47	.0.1	<b>n</b>
N-1801 conl chop	10-29-47	0.0	n
None washed by Mr. R. A. Wintel	19-27-47		
Sump SV-3, oil being added, 2 incl	as from		•
orhaust Jump SV-7, oil being added, 2 incl		0.2	Ħ
oxhanet	•	0.5	17
Tung SV-1, oil boing added, 2 inch	les from	0.5	**
Newson in this land to the Reguested by Er. L. F. Haeso	10-24-47		
Whing initial out and soldering to accument to tost instrument, standard misseument	in ago 4	0.0	ti
end recoldering line, stage 4 Links; initial out and soldering i	· :n	0.0.	t <del>t</del> .
occreoblem to test instrument, obs	 120 5	0.0	¤
Jerykoto operatien on MM, stage (	3 .	0.1.	tt
			The second section of the second section is the second section of the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the section is the second section in the section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the section is the second section in the section is the section in the section in the section is the section in the

K-006-8 Cell 5 DHM Tects 10-24-47	•	
Requested by Mr. L. F. Hoss		
Rackground sample in conver of cell enclosure	0.0	Alpha counts/min/ft3
Making initial out in line and soldering in connection to test instrument	0.0	<b>n</b>
Disconnecting test instrument and re- soldering line Making initial cut in line and soldering	0.0	π
in connection to test instrument Disconnecting test instrument and re-	0.0	tt
soldering line	0.0	n
K-309-2 Coll 6 DBN Tosts 10-29-49 Roquested by Mr. L. F. Heese	7	
Sackground sample in center of cell enclosure	0.0	η
Complete operation on DBM stage 1, 6 inches from operation Making initital cut and soldering in	0.0	ព
connection to test instrument, 6 inches	0;1	
Disconnecting test instrument and re- coldering line, 6 inches from operation Making initial cut in line, 6 inches away	0.3 1:0	ង , ម
N-181 Foed Room 10-29-4 Requested by Mr. L. C. Willson	7	
While both B food bube #2 was being dis- connected and immediately there after,		
• 4 inches from tube Khilo bath B feed tube #4 was being dis-	· 3.2 ∕	n •
connected and immediately there after, 4 inches from tube Bath A, 2 inches from each feed tube whil	1.3	t3
each tube was being disconnected	0.6	n
N-302-5 Operating Floor 10-22-4	.7	
Recido colle 9 & 10 lubs oil lines Incide of line recorder station at	0.0	π· 
tube rack A	0.0	n
Reside cells 1 & 2 coolant pumps	0.1	t <del>3</del>

	<b>V</b> -		
K-500-3 Operating Floor	10-22-47		
At building penal board Inside of line recordor station		0.1	Alpha counts/min/ft8
at ranifold pump		0.2	19
Above A inlet valve cell 7		0.1	12:
N-000-2 Operating Floor	10-22-47		
Boside Kinney pump SV-3 Inside of line recorder station of	ınder	0.0	- <i></i>
sample monifold		0.1	tŧ
Boside colls 1 & 2 coolant pumps		0.0	tt
K-302-1 Operating Floor	10-22-47		
Above E spare building bypass val Incide of line recorder station	ve	0.0	n
at tube rack A		0.0	T <del>T</del>
At cells 5 & 7 panel boards		0.1	π
E-301-3 Operating Floor	10-22-47		
Beside cell 5 coolant pump Inside of line recorder station		0.0	π
at eample manifold		0.0	n
At building panel board		0.0	η
X-301-1 Operating Floor	10-22-47		
Incide of line recorder station at tube rack A			
Alors A bypass valve coll 2		0.0	n
Conter of building above cells 7	t. 0	0.0	n n
compor or negreting group coils !	<b>a</b> 6.	0.0	u
M-901-5 Operating Floor	10-22-47		
Abevo A inlet valvo cell 6 Inclide of line recorder station a	t	0.0	n
manifeld pump		0.1	и
45 call 1 coclant pump		0.1	tt <del>tt</del>
N-701-0 Operating Flour	10-22-47		
At building panel board Inside of line recorder station		0.0	π
at tube rack A		0.0	tt.
Above A sutlet valve cell 7	•	0.0	n
		0.0	••



K-301-3	Operating Floor	10-22-47		
Al	pove B outlet valve coll 6		0.0	Alpha counts/min/?tS
I	nside of line recorder station		0.0	11
at Al	o samplo sanfiold pump bovo B spare building outlet val	770	0.0	· u
K-209-	1 Operating Floor	10-22-17		
E	esido colla 1 & 2 coolant pumps nside of lino recordor station	•	0.0	l7
3.1	t tube rack A		0.1	Ħ
B	eside Kinney pump SV-3		0.3	n
X-309-	2 Operating Floor	10-23-47		
Ð	esido. cell 1 & 2 coolant pumps incide of line recorder station		0.1	n
7	t sample manifold pump		0.2	Ħ
A	bovo B inlot valve cell 5		0.1	ti
X-309-	3 Operating Floor	10-23-47		
1	t cerbon trap S-3 Incido of line recordor station		0.1	t <del>i</del>
	at sample manifold		0.3	#
Į	Above B sparo building bypass val	lve	0.2	<b>19</b>
<b>1-310</b>	-l Operating Floor	10-23-47		_
į	At cell I coelant pump Inside of line recorder station		0.1	<b>v</b>
,	at tubo rack A		0.1	η . -
	At colls 5 & 6 lubo oil lines		0.0	u
N-310	-2 Operating Floor	10-23-47		
	Abovo B inverse recycle valve so Inside of line recorder station	11 8	0.0	Ħ
	at ranifold pump		0.1	<b>17</b> .
	Abovo A inverse recycle valve co	21 1	0.1	n .
X-310	-7 Operating Floor	10-23-47		_
	Abovo A building inlet valve Inside of line recorder station	•	0.0	n
	at tubo rack A		0.1	77
	Esside cells 5 & 6 ccolant pumps		0.0	n

K-311-1 Operating Floor

10-25-47

Inside of line recorder station at sample manifold pump Above A outlet valve cell 7 At building panel board

0.0 Alpha counts/min/ft3

0.1

n

K-311-1 Cell Floor

10-25-47

Benide cell 7 pump 3A Beside cell 2 pump 5B 0.0

ч

Note: For all samples marked "Operating Floor" the inlet of the sampling instrument was 2 feet above the floor.

R. J. Clouse

Approved:

W. C. Hartman

JAT/nf

PW.8

## RESTRICTED

#### CASCADE SERVICES DEPARTMENT

PROCESS LABORATORY

RADIATION SURVEY

#### HEALTH SURVEY REPORT

Date of Issue

October 28, 1947

#### DISTRIBUTION LIST

Mr. L. G. Bamer

Mr. S. C. Barnett

Dr. C. K. Book

Dr. M. J. Costello

Mr. W. C. Hartman

Mr. A. P. Huber

Mr. W. B. Humes

Mr. M. S. Lisso

Mr. J. A. Marshall

Mr. H. M. Preuss

Mr. M. F. Schwenn

Mr. M. P. Seyfried

Mr. G. T. E. Sheldon

Mr. B. Speyers

Mr. S. Visner

Mr. L. C. Willson

Mr. R. A. Winkel

File

#### HEALTH SURVEY REPORT

To: Mr. G. T. E. Sheldon Date: October 28, 1947 Location: K-503-7

10-20-47 In the K-1301 conversion room beta-gamma determinations on the cold traps, heaters, and reactors were all zero.

10-21-47 Beta-gamma measurements on the decontamination tanks in the K-1303 decontamination room varied from 0.000 to 0.021 with an average of 0.005 R/8 hours.

In K-631 bata-gamma measurements on the carbon traps and cylinders were all sero.

In K-151 beta-gamma measurements on the cylinders varied from 0.000 to 0.021 and averaged 0.009 R/8 hours.

10-22-47 In the K-1303 decontamination room beta-gamma measurements on the decontamination tanks varied from 0.000 to 0.022 and averaged 0.004 R/8 hours.

10-23-47 Bota-gamma measurements on the cylinders and carbon traps in K-631 were all zero.

Beta-gamma measurements on the cylinders in K-131 varied from 0.000 to 0.010 with an average of 0.004 R/8 hours.

Air samples of air-borne alpha-active dust were as follow:

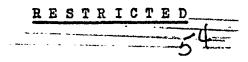
X-305-7 PW Station, seven feet east of withdrawal manifolds	10-17-47 10-20-47 10-21-47 10-22-47 10-23-47 10-24-47	O.2 7 Alpha counts/mix O.1 " O.1 " O.1 " O.0 "	n/ft3
K-1301 outside of weighing room door	10-20-47 10-22-47	1.0 H	
N-1303 decontamination room, between tanks A & E	10-20-47 10-22-47	0.9 s	

K-631 near withdrawal manifolds	10-21-47	0.1	Alpha counts/min/ft3
K-131 between units A & B	10-21-47	0.6	# *
K-1401 seal shop	10-21-47	0.0	13
r-race goar enob			
K-305-10 Cell Floor	10-16-47		
		0.0	n
Beside cell 1 pump 4A	•	0.0	ដ
Beside cell 7 pump 2A		***	
7 FOR O 0-13 TH	10-16-47		
K-305-9 Cell Floor	70-70-21	0.0	#
Beside cell 8 pump 4A		0.0	Ħ
Beside cell 2 pump 4A		0.0	
	30 36 AT		•
K-305-8 Cell Floor	10-16-47	0.0	Ħ
Beside cell 2 pump 4A		0.0	ti
Beside cell 8 pump 4A	•	0.0	
K-305-7 Cell Floor	10-16-47		Ħ
Beside cell 2 pump 3B		0.0	 #
Beside cell 8 pump 4A		0.0	•
R-305-6 Cell Floor	10-16-47		_
Beside cell 1 pump 1B		0.0	<b>N</b>
Beside cell 7 pump 2A	,	0.0	<b>u</b>
K-305-5 Cell Floor	10-16-47		_
Beside cell 6 pump 2A		0.0	•
Beside cell 2 pump 2B		0.0	Ħ
K-305-4 Cell Floor	10-16-47		
Beside cell 2 pump 6A	•	0.0	#
Beside cell 9 pump 5A		0.0	n
K-305-3 Cell Floor	10-16-47		_
Beside cell 10 pump 6A	•	0.0	
Beside cell 1 pump 4B		0.0	*
, actually obtained from the contract of the c			
K-305-2 Cell Floor	10-16-47		
Beside cell 2 pump 6A		0.0	Ħ
Boside cell 7 pump 3A		0.0	•
Dodino corr : pamp co			•
K-305-1 Cell Floor	10-16-47		
Boside cell 4 pump 1B	:	0.0	Ħ
In escape alley at front door		0.0	n
TH ARCEDS STIAN SO IT ON COOL			
K-304-5 Cell Floor	10-20-47		
	44 44 41	0.0	· <b>n</b>
Beside cell 9 pump 4A		0.0	n
Beside cell l pump 5Å		<b>V</b> • • •	

			•
K-3C4-4 Cell Floor	10-20-47		
Beside cell 3 pump 3B		0.0	Alpha counts/min/ft3
Beside cell 8 pump 4B		0.0	mapping country ministry
W 804 5 C. 22 B1			
K-S04-S Call Floor	10-20-47		
Beside cell 9 cump 4A		0.0	tt .
Beside cell 2 pump 3A		0.0	π
X-304-2 Cell Floor	70.00.45		
Beside cell 1 pump 4A	10-20-47	• •	
Beside cell 10 pump 6B		0.0	. 15
· ·		0.0	. 45
K-304-1 Cell Floor	10-20-47		
Beside cell 7 pump 6A	10 10 a.	0.0	Ħ
Boside cell 4 pump 5A		0.0	Ħ
***			
K-305-10 Pips Gallery	10-17-47		
Above Cell 4		0.0	<b>n</b> ,
Above Cell 7	•	0.1	tt
K-SO5-9 Pips Gallery	• • • • • • •		
Above cell 6	10-17-47	_	
Center of service gallery		0.0	<b>n</b>
-curor or corates garrary		0.0	<b>#</b>
K-305-6 Pipe Gallery	10-17-47		•
Above cell 6		0.0	n
Above cell 9		0.0	 R
* ***		0.0	
K-305-7 Pipe Gallery	10-17-47		·
Above cell 10		0.0	n
Above cell 1		0.0	n
K-305-6 Pipo Gallery			
Above cell 1	10-17-47		
Above cell 7		0.0	n .
		0.0	Ħ
K-305-5 Pipe Gallery	10-17-47		
Above cell 10	Tout lend l	0.0	<b>u</b>
Above cell 2		0.0	11
_		0.0	
K-305-1 Pipe Gallery	10-17-47		·
Above cell 4		0.0	π
Above cell 7		0.1	Ħ
V-SOS -S Pina Call			
X-S05-5 Pipe Gallery Above cell 8	10-17-47		
	•	0.0.	n
Decide building B inlet valve		0.1	n

RESTR<del>IOTED</del>

K-305-2 Pipe Gallery Above Coll 4 Above Coll 5	10-17-47	0.0 0.0	Alpha counts/min/ft3
K-305-1 Pipe Cellery	10-17-47		Ħ
Above Cell 10		0.0	e e
Center of service gallery		0.0	ч
K-304-5 Pipe Gallery	10-17-47		
Above Cell 1		0.0	π
Above Cell 5		0.0	**
K-E04-4 Pipe Gallery			
Above Cell 8	10-17-47	0.0	п
At C-216 manifold	10-20-47		π
, and dente managed and			
K-SO4-3 Pipe Gallery	10-20-47		
Beside B bypass valve cell 4		0.0	tt
At C-216 disposal valve call 9		0.0	n
<b></b>	30 00 45		
K-304-2 Pipe Gallery	10-20-47	• •	n
Beside A outlet valve cell 8		0.0	n
Beside A outlet valve cell 1		0.0	
K-504-1 Pipe Gallery	10-20-47		
Beside B bypass valve cell 4	20-00-11	0.0	Ħ
Boside A outlet valve cell 9	•	0.0	n
K-303-10 Operating Floor	10-20-47		n
Above A normal building outlet valv	8	0.2	u u
Inside of line recorder station		0.1	n '
Beside colls 7 & 8 coclant pumps		0.0	•
K-503-7 Operating Floor			
Above B spare building outlot valve	10-20-47	0.0	tī
Inside of line recorder station at			
tube rack A	10-21-47	0.1	n
Above A inlet valve Cell 8	10-21-47	0.0	
K-303-6 Operating Floor	10-21-47		
Boside cells 9 & 10 coolant pumps	20-52-21	0.0	ti
Inside of line recorder station at		4.0	
sample manifold		0.0	n
Above A normal building bypass valv	re ·	0.0	
7 PAR C Annualis a Discour			
K-305-5 Operating Floor		0.0	π
Beside cells 1 & 2 coolant pumps		J.U	
Inside of line recorder station at sample manifold		0.1	n
Above B inverse recycle valve cell	R	0.0	
Whose p Thanks Lachers agrae gatt	•	<b>940</b>	



~5œ

K-303-4 Operating Floor At cell 9 panel board Inside of line recorder station	10-21-47	0.0	Alpha counts/min/ft3
at tube rack A		0.0	Ħ
Above A bypass valvo cell 1		0.0	ti
K-303-S Operating Floor	10-21-47		
Above B normal building inlet valve Inside of line recorder station at		0.0	π
sample manifold		0.1	ប
Between cells 9 & 10 panel boards		0.0	Ħ
K-303-2 Operating Floor	10-21-47		
Reside Kinney pump SV-3 Inside of line recorder station		0.0	n
at tube rack A		0.0	n
Above A inverse recycle valve cell 3	3	0.1	n
K-303-1 Operating Floor	10-21-47		
Above A outlet valve cell 2 Inside of line recorder station		0.1	n .
under sample manifold		0.0	Ħ
Beside cells 7 & 8 coolant pumps .		0.2	Ħ

Note: For all samples taken on the cell floor the inlet of the sampling instrument was 2 feet above the floor.

For all samples taken in the pipe gallery the inlet of the sampling instrument was 3 feet above the insulation on the cell and 1 foot or less from the insulation on the pipes, unless otherwise noted.

For all samples taken on the operating floor the inlet of the sampling instrument was 2 feet above the floor.

H. J. Culbert

Approved:

JHP/nf

RESTRICTED

55

#### CASCADE SERVICES DEPARTMENT

#### PROCESS LABORATORY

#### RADIATION SURVEY

#### HEALTH SURVEY REPORT

Date of Issue October 22, 1947

#### DISTRIBUTION LIST

Mr. L. G. Bamer
Mr. S. C. Barnett
Dr. C. K. Beck
Dr. M. J. Costello
Mr. W. C. Hartman
Mr. A. P. Haber
Mr. W. B. Hames
Mr. M. S. Lisso

Mr. J. A. Marshall

Mr. E. M. Prouss
Mr. M. F. Schwenn
Mr. M. P. Seyfried
Mr. G. T. E. Sheldon
Mr. B. Speyers
Mr. S. Visner
Mr. L. C. Willson
File

R-E-S-T-R-I-C-T-E-D

#### BEALTH SURVEY REPORT

To: Mr. G. T. E. Sheldon Location: K-303-7

Date: October 21, 1947

10-13-47 Beta-gamma measurements on the reactors, heaters, and cold traps in the K-1301 conversion room were all zero.

In the K-1303 decontamination room beta-gamma measurements on the tool table and work bench were all zero; those made on the decontamination tanks ranged from 0.000 to 0.034 and averaged 0.003 R/8 hours.

10-14-47 In K-631 beta-gamma determinations on the cylinders and carbon traps were all zero.

In K-131 beta-gamma determinations on the cylinders and on the ends of the vaporization units ranged from 0.005 to 0.028 with an average of 0.009 R/8 hours.

Air samples of air borns alpha-active dust were as follows:

K-806-7 P.W. Station seven feet past	10-10-47	0.0	Alpha counts/min/ft3
of withdrawal manifolds	10-15-47	0.0	9
	10-14-47	0.0	n
	10-15-47	0.5	n
•	10-16-47	0.2	
K-1305 decontamination room,			
between tanks A & E	10-13-47	0.1	<b>n</b>
K-1501 outside weighing room door	10-13-47	0.7	• 🛊
K-1405 center of downstairs room	10-13-47	0.2	•
K-1405 center of laboratory	10-13-47	0.1	Ħ
K-631 near withdrawal manifolds	10-14-47	0.0	*
K-131 west end of cylinder racks	10-14-47	0.0	Ħ
K-1401 AC pump shop	10-14-47	0.1	•
K-1401 seal shop	10-14-47	0.1	n
K-402-5, Cell 5 DBM Tests			
Requested by Mr. L. F. Haese	10-15-47		
Complete operation on DBM, stage 1		0.0	*

K-309-2	Call	2	DBM	Tests	all	samples	taken	6	inches	from	operation
Requ	uesto	1	by Mi	L.	F. Ha	e se	10-1	5-4	17		

Requested by Mr. L. F. Haese 10-	15-47	
Disconnecting test instrument and		
resoldering DBM, stage 2	0.2 Al	oha counts/min/ft8
Complete operation on DBM, stage 3	0.1	*
Meling initial out and soldering in	_	Ħ
compation to test instrument, stage of	0.1	**
Disconnecting test instrument and re-		
soldering DBH, stage 4	0.1	**
Initial out on DBM line, stage 5	1.6	**************************************
Resoldering DBM line, stage 5	1.1	₩
Complete operation on DBM, stage 6	0.1	*
K-306-7 Line Recorder Station 10	-15-47	
15 inches from manifold, hoke tube		
being disconnected after inventory		-
sample had been taken	1.2	R
15 inches from manifold, hoke tube		
being disconnected after inventory		<i>_</i>
sample had been taken	2.2	•
-	-15-47	
15 inches from manifold, hoke tube		
being disconnected after inventory		-
sample had been taken	0.4	*
K-510-1 Operating floor, Kinney pumps being Requested by Mr. R. A. Winkel	ng drained and fille	ed.
	lne 0.1	*
Pump SV-3, 6 inches from oil drain p	-F-	Ħ
Pump 8V-1, 6 inches from oil drain p	rbe oen	
K-509-3 Operating floor, Kinney pumps bei Requested by Mr. R. A. Winkel	ng drained and fill 0-15-47	eđ.
to a second second	0.2	•
Pump SV-3, 6 inches from exhaust	0.1	#
Pump SV-2, 6 inches from exhaust	<b>062</b>	
K-501-5 Operating floor, Kinney pumps bei Requested by Mr. R. A. Winkel	ng drained and fill 0-16-47	eđ•
Pump SV-3, 2 inches from oil drain p	ipe 0.1	<b>#</b>
K-302-1 Operating floor Kinnoy pumps being Requested by Mr. R. A. Winkel	g drained and fille 0-16-47	e <b>d</b> ∙
	ine 0.1	₩
Pump SV-1, 2 inches from oil drain p	0.0	*
Pump SV-2, 2 inches from exhaust	0.2	*
Pump SV-5, 2 inches from exhaust		

K-302-2 Operating floor, Kinney pumps Requested by Mr. R. A. Winkel	10-16-47	and filled.	
Pump SV-2, 2 inches from oil drai	n pipe	0.2 Alpha	counts/min/ft3
K-302-4 Operating floor, Kinney pumps Requested by Mr. R. A. Winkel	being drained 10-16-47	and filled.	ж
Pump SV-1, 2 inches from exhaust		0.0	n
K-302-5 Operating floor, Kinney pumps Requested by Mr. R. A. Winkel	being drained 10-16-47	and filled.	<b>.</b>
Pump SV-1, 2 inches from oil drain Pump SV-3, 2 inches from exhaust	n pipe	0.0 0.4	R H
K-303-1 Operating floor, Kinney pumps Requested by Mr. R. A. Winkel	being drained 10-16-47	and filled.	
Pump SV-3, 2 inches from oil drain Pump SV-1, 2 inches from exhaust	n pipe	0.0 0.1	# #
K-305-3 Operating floor -	10-13-47		
Above A bypass valve Cell l Inside of Line Recorder Station		0.1 0.0	R 11
K-305-2 Operating floor	10-13-47		
Beside Cells 3 & 4 coolant pumps In front of Cells 9 & 10 panel boo	rds	0.0 0.1	# #
K-305-1 Operating floor	10-13-47		
Beside Kinney pump SV-3 Above A spare building bypass val	Vie.	0.0 0.1	<b>91</b> 11
•		V. L	
K-304-5 Operating floor Inside of Line Recorder Station	10-13-47	0.3	*
Above A inlet valve Cell 9		0.1 0.1	n
K-304-4 Operating floor Above B inlet valve Cell 10	10-13-47		
Above Cell 3		0.0	#
K-504-3 Operating floor	10-13-47	-	
Beside Cells 1 & 2 coolant pumps Beside Kinney pump SV-3	<del></del>	0.2	<b>9</b>
* * * * * * * * * * * * * * * * * * * *		0.0	<b>19</b>
K-304-2 Operating floor Inside of Line Recorder Station	10-13-47		
Above A inlet valve Cell 9		0.1 0.0	n

K-504-1 Operating floor Above A bypass valve Cell 8 Above A spare building bypass value	10-13-47	0.1 0.0	Alpha counts/min/ft3
K-303-10 Cell Floor Escape alley door	10-13-47	0.1	n
Escape alley between Cells 3 & 4		0.0	Ħ
K-303-9 Cell Floor Beside Cell 4 pump 2A	10-13-47	0.0	n
In escape alley Cell 3 pump 6B		0.0	Ħ
K-312-3 Pipe Gallery	10-14-47		17
Above cold trap Center of pipe gallery		0.0 0.1	Ħ
K-312-8 Cell Floor	10-14-47	• -	n
At head of stairs to basement In alley between Cells 10 & 12		0.0	#
K-312-2 Pipe Gallery	10-14-47		
Above Cell 15 Above Cell 2	•	0.0 0.0	*
K-512-2 Cell Floor	10-14-47		_
Beside Cell 5 Beside Cell 17		0.0	#
K-312-1 Pipe Gallery Above Cells 1 & 2	10-14-47	0.0	R
Above Cell 11		0.0	n
K-312-1 Cell Floor Center alley at basement stairs	10-14-47	. 0.1	
Beside Cell 5		0.1	n
K-306-4 Pipe Gallery Above Cell 5	10-15-47	0.0	19
Above Cells 1 & 2		0.1	Ħ
K-306-4 Cell Floor  Escape alley between Cells 3 & 4	10-14-47	0.1	, n
Withrawal alley Cell 11		0.0	Ħ
K-506-3 Pipe Gallery Above Cell 3	10-15-47	0.1	•
Above Cell 9		0.1	- 11
K-506-3 Cell Floor	10-14-47		<del>s</del>
Escape alley between cells 9 & 10 At escape alley door		0.1	# #

K-306-1 Pipe Gallery Above intersectional Cell Above Cell 11	10-15-47	0.1 0.0	Alpha counts/min/ft3
K-306-1 Cell Floor In escape alley beside Cell 1 In escape alley beside Cell 5	10-15-47	0.0 0.0	11
K-505-12 Pipe Gallery Above Cell 10 Center of service gallery	10-15-47	0.0	11
K-305-12 Cell Floor Front of building In withdrawal alley Cell 9	10-15-47	0.0 0.1	## #
K-305-11 Pipe Gallery Center of service gallery Above Cell 5	10-15-47	0.0 0.1	w *
K-305-11 Cell Floor In withdrawal alley Cell 10 In escape alloy between 1 & 2	10-15-47	0.0 0.1	<b>व</b> स <sub>.</sub>

Note: For all samples taken on the cell floor the inlet of the sampling instrument was 2 feet above the floor.

For all samples taken in the pipe gallery the inlet of the sampling instrument was 3 feet above the insulation on the cell and 1 foot or less from the insulation on the pipes, unless otherwise noted.

For all samples taken on the operating floor the inlet of the sampling instrument was 2 feet above the floor, unless otherwise noted.

H. J. Culbert

Approved:

W. C. Hartman

JHP/nf

# CASCADE SERVICES DEPARTMENT PROCESS LABORATORY RADIATION SURVEY

#### HEALTH SURVEY REPORT

Date of Issue October 14, 1947

#### DISTRIBUTION LIST

Mr. L. G. Bamer
Mr. S. C. Barnett
Dr. C. K. Beck
Dr. M. J. Costello
Mr. W. C. Hartman
Mr. A. P. Huber
Mr. W. B. Humes
Mr. M. S. Lisso
Mr. J. A. Marshall

Mr. H. M. Prouss
Mr. M. F. Schwenn
Mr. M. P. Seyfried
Mr. G. T. E. Sheldon
Mr. B. Spoyers
Mr. S. Vigner
Mr. L. C. Willson
File

#### HEALTH SURVEY REPORT

Date: October 14, 1947 Mr. G. T. E. Sheldon Location: K-303-7 In the K-1303 decontamination room beta-gamma determinations on the 10-6-47 work bench, tool table, and decontamination tanks varied from 0.000 to 0.007 with an average of 0.002 R/8 hours. In the K-1301 conversion room beta-gamma determinations on the heaters, cold traps, and reactors were all zero. Beta-gamma determinations on the cylinders and carbon traps in K-631 10 - 7 - 47were all zero. Beta-gamma determinations on the cylinders in K-131 varied from 0.007 to 0.017 and averaged 0.010 R/8 hours. Beta-gamma measurements on the decontamination tanks, tool table, and 10-8-47 work bench in the K-1303 decontamination room varied from 0.000 to 0.008 and averaged 0.001 R/8 hours. All beta-gamma measurements on the reactors, cold traps, and heaters in the K-1301 conversion room were zero. In K-631 all beta-gamma determinations on the cylinders were zero. 10-9-47 In K-131 the beta-gamma determinations on the cylinders varied from 0.000 to 0.031 with an average of 0.013 R/8 hours. Air samples of air-borne alpha-active dusts taken during the week were as follows: Alpha counts/min/ft3 0.0 10-3-47 K-308-7 P.W. Station seven feet east 0.0 10-6-47 of withdrawal manifolds 0.1 10-7-47 0.0 10-8-47 10-9-47 0.1 K-1301 outside of weighing room door 0.0 10-6-47 1.3 10-8-47 0.2 10-6-47 K-1803 decontamination room, 0.2

10-8-47

10-6-47

10-6-47

0.0

0.3

between tanks A & E

K-1405 downstairs room, center of

K-1405 laboratory, center of

K-310-1, Cell 1 DBM Changes Requested by Mr. L. F. Haese	10-6-47		
Background, center of cell enclosure		0.0	Alpha counts/min/îts
Complete DBM change at stage 1 Making initial out and soldering in		0.0	u .
connection to test instrument stage 2		0.0	ti
Disconnecting test instrument and resoldering DBM, stage 5	•	0.0	ធ
Initial out on stage 4 LBM		0.0	स
Disconnecting test instrument and re-	•		•
soldering DBH, stage 5		0.0	16
Complete DBM change at stage 6		0.0	n
Residual, at center of cell enclosure		0,0	n -
K-631 near withdrawal manifolds	10-7-47	0.0	π 
	10-9-47	0.0	<b>n</b> 19
N-131 near vaporization baths	10-7-47	0.0	ts
	10-9-47	0.0	•
K-310-3 Cell 3 seal change pump 6A Two fest from seal before old	10-3-47		
seal was removed		0.0	प्त
Two feet from seal while old seal bei	ng		
removed		0.1	12
Two feet from seal, shaft being washe	d and		
new seal being installed		0.0	n
K-510-3 dell 6 seal change pump SB	10-3-47		
Two feet from seal while new seal			_
being installed		0.0	<b>₹</b>
Two feet from seal after new seal was	3		
installed	10 0 45	0.0	••
K-306-5 Operating floor	10-3-47		n
Near front of building		0.0 0.0	ti
Near center of building Hear back of building		0.0	Ħ
K-206-2 Operating floor	10-3-47	0.0	
Near front of building	20-0-41	0.0	ជ
Near center of building		0.0	π
Near back of building		0.0	Я
K-306-2 Pipe Gallery			
Above cell 13 pump 1B		0.0	<b>*</b>
Above cell 17 pump 5B		0.0	<b>n</b>
Above cell 3 pump 1B		0.0	Ħ
E-306-2 Cell floor			n
Cell 1 between pumps 1B and 2A		0.0	11
Cell 5 between pumps 2A and 3B		0.0	# # # # # # # # # # # # # # # # # # #
Cell 11 pump 3B	30 0 40	0.0	**
K-312-3 Operating floor	10-9-47		
Above B inlet valve and B bypass val:	<b>▼</b> □	0.0	ŧŧ
cell 4 Center of floor between panel boards	for	0.00	
cells 15 and 16	- ••	0.0	<b>n</b>
			The state of the s

4 حا

R-312-2 Operating floor  Between tube racks in line recorder a  Center of floor between panel boards	10-9-47 station for	0.0	Alpha. counts/min/ft5
K-312-1 Operating floor	10-9-47	0.0	Ħ
In front of building board		0.0	77
Reside coolent pumps in center of bui	lding 10-9-47	0.0	π
Beside Kinney pump SV #1		0.0	n
In front of cell 12 panel board K-306-3 Operating floor		0.0	<b>n</b>
Between panel boards of cells 1 and 2		0.0	11
Beside coolant pumps, cells 13 and 14		0.0	n
A-306-1 Operating floor	10-9-47		
Inside of line recorder station		0.0	Ħ
In front of cell 11 panel board		0.0	ti
K-1004-D, Room 21 Requested by Mr. H. A. Bernhardt	10-9-47		
Two feet south of hood on west table : chest height	at	0.0	Ħ
North end of low table, 18 inches about	ve.	0.0	
top of table Middle of east side of west table, 1 is above top of table		0.0	Ħ
	•	0.0	n
Requested by Mr. H. A. Bernhardt	10-10-47		
General air sample in room, no special operations proceeding		0.2	n .

H. J. Culbert

Approved:

W. C. Hartman

JHP/nf

#### CASCADE SERVICES DEPARTMENT

#### PROCESS LABORATORY

#### RADIATION SURVEY

#### HEALTH SURVEY REPORT

Este of Issue October 8, 1947

#### DISTRIBUTION LIST

Mr. L. G. Bamer

Mr. S. C. Barnett

Dr. C. K. Beck

Dr. M. J. Costello

Mr. W. C. Hartman

Mr. A. P. Huber

Mr. W. B. Humes

Mr. M. S. Lisso

Mr. J. A. Marshall

Mr. H. M. Prouss

Mr. M. F. Schwenn

Mr. M. P. Soyfried

Mr. G. T. E. Sheldon

Mr. B. Spayers

Mr. S. Visner

Mr. L. C. Willson

File

RESTRICTED

ble

#### HEALTH SURVEY REPORT

To: Mr. G. T. E. Sheldon

Date: October 7, 1947

Location: K-303-7

9-29-47 In the K-1303 decontamination room beta-gamma measurements on the work bench, tool table, and decontamination tanks varied from 0.000 to 0.083 and averaged 0.008 R/8 hours.

In the K-1301 conversion room beta-gamma measurements on the cold traps, heaters, and reactors were all zero.

9-30-47 Beta-gamma measurements on the cylinders in K-131 varied from 0.007 to 0.017 with an average of 0.012 R/8 hours.

Beta-gamma measurements on the carbon traps and cylinders in K-631 were all zero.

10-1-47 Beta-gamma determinations on the decontamination tanks, work bench, and tool table in the K-1303 decontamination room varied from 0.000 to 0.028 with an average of 0.004 R/8 hours.

Beta-gamma determinations on the reactors, cold traps, and copper, connections in the K-1301 conversion room were all zero.

Beta-gamma determinations made on "Buffalo Fans" in Warehouse C were all zero.

Air samples of air-borne alpha-active dusts taken during the week were as follows:

K-306-7 P.W. Station seven feet west of withdrawal manifolds	9-29-47	0.0	Alpha counts/min/ft3
or wrondlawar manifolds	9-30-47	0.0	W
	10-1-47	0.0	η
•	10-2-47	0.1	Ħ
K-1303 decontamination room,	9-29-47	0.7	11
between tanks A & E	10-1-47	2.2	n
X-1301 outside of weighing room door	9-29-47	0.9	79
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	10-1-47	0.1	`17
K-1405 downstairs room	9-29-47	0.0	n
K-1405 laboratory	9-29-47	0.0	n
K-131 near vaporization baths	9-30-47	0.1	n
K-631 near withdrawal manifolds	9-30-47	0.1	Ħ
K-301-2 cell 8 seal change, pump 5B	9-30-47		
Before seal opened, two feet to on			
of seal		0.0	η
Body of seal being removed, part o	f process		
soal still in place, two feet to o	ne side		
of seal		0.9	, 19

K-301-2 (Cont'd.)		
Old seal removed, gas blowing out around	ì	
shaft, two feet to one side of seal.	0.7	Alpha counts/min/ft3
K-SO1-2 cell 8 seal change, pump 6A 9-30	-47	,
Old seal being romoved, two feet		
to one side of seal	10.6	Ħ
Old seal removed, shaft of impeller being		
washed with trichloroethylene, two feet		_
one side of seal X=306=6	0.1	η
	40	
Operating floor 10-1		11
End of cell 1 panel board	0.0	" H
Ten feet east of cell 10 panel boar		•
Ten feet northeast of cell 13 panel		n
board Cell floor 10-2	0.0	u u
	· -	n
North end of cell 1 pump 4A	0.0	"
Between cell 7 pump 4B and cell 8	0.0	n
pump 3B	0.0	 11
South end of cell 12 pump 4A Pips gallery 10-2	0.0	•
		tt
Above cell 14 pump 5B Between cells 9 and 10	0.0	
Above cell 3 pump 5B	0.0	Ħ
K-306-5	0.0	•
Cell floor 10-2	)A7	
Cell 1 between pumps 1B and 2A	0.0	n
Between cells 7 and 8 in escape all		n
Cell 12 pump 2A	0.0	· n
Pipe gallery 10-2	_	
Above cell 12 pump 1B	0.0	п
Center of building	0.0	n
Above cell 2 pump 1B	. 0.0	Ħ
· · · · · · · · · · · · · · · · · · ·		

H.J. Cillian

H. J. Culbert

Approved:

W. C. Hartman

Jan/nf

Sce Law Poer

### RESTRICTED

#### CASCADE SERVICES DEPARTMENT

PROCESS LABORATORY

RADIATION SURVEY

#### HEALTH SURVEY REPORT

Date of Issue September 30, 1947

#### DISTRIBUTION LIST

Mr. L. G. Bamer Mr. S. C. Barnett

Dr. C. K. Beck

Dr. M. J. Costello

Mr. W. C. Hartman

Mr. A. P. Huber

Mr. W. B. Humes

Mr. M. S. Lisso

Mr. J. A. Marshall

Mr. H. M. Preuss

Mr. M. F. Schwenn

Mr. M. P. Seyfried

Mr. G. T. E. Sheldon

Mr. B. Speyars

Mr. S. Visner

Mr. L. C. Willson

File

----RESTRICT-ED

To: Er. G. T. E. Sheldon

Location: K-303-7

Date: "September 30, 1947

9-22-47 In K-1303 in the decontamination room, beta-gamma measurements on the tool table, work bench, and decontamination tanks varied from 0.000 to 0.010 with an average of 0.004 R/8 hours.

9-23-47 Beta-gamma determinations on the reactors, heaters, and cold traps in the K-1301 conversion room were all zero.

Beta-gamma determinations on the cylinders and carbon traps in N-631 were all zero.

In K-131 beta-gamma measurements on the carbon traps were all zero, and those on the cylinders varied from 0.007 to 0.014 with an arrange of 0.010 R/8 hours.

9-2k-47 Beta-gamma determinations on the reactors, cold traps, and heater in the K-1301 conversion room were all zero.

Beta-gamma determinations on the work bench, tool table, and decontamination tanks in the K-1303 decontamination room varied from 0.000 to 0.062 and averaged 0.005 R/8 hours.

9-26-47 In the K-1301 conversion room beta-gamma measurements on the cold tracs, heaters, and reactors were all zero.

In the K-1303 decontamination room, bett-gamma measurements on the work bench, tool table, and decontamination tanks varied from 0.000 to 0.034 and averaged 0.005 R/8 hours.

Beta-gamma determinations on the cylinders and carbon traps in %-631 were all zero.

Beta-gamma determinations on the cylinders in K-131 varied from 0.003 to 0.010 with an average of 0.007 R/8 hours.

hir camples of air-borne alpha-active dusts taken during the week were as follows:

K-306-7 P.m. Station seven feet west of withdrawal mani- folds	9-22-47 9-23-47 9-24-47 9-25-47 9-26-47	0.2 0.3 0.1 0.1 0.1	Alpha counts/mir/ft3
--	---	---------------------------------	----------------------

K-1303 decontamination room between tanks A & E  K-131 near vaporization baths  K-631 near drawoff manifold  K-1401 AC pump shop	9-22-47 9-24-47 9-26-47 9-23-47 9-26-47 9-23-47 9-23-47	0.1 1.6 1.1 0.1 0.2 0.0 0.1	nlpha counts/min/ft3
K-303-5, Cell #7, pulling pump Edge of opening while pump being After pump is pulled, 6 inches i impeller		365.8	n n
K-1405 downstairs room K-1405 laboratory	9-23-47 9-23-47	0.0 0.0	ti It
K-1301 outside of weighing room door	9-23-47 9-24-47 9-26-47	0.1 0.1 6.8	) #
K-303-8 Operating floor In LRS at east end of panel boar Above cell 4 A inlet valve By west entrance to CCR	9-25-47	0.0 0.0 0.0	tt 13 21
K-303-9 Operating floor Above cell 5 B outlet valve By north end of cell 3 panel book In LRS at south west corner of manifold		0.0 0.1 0.0	n n

H. J. Culbert

Approved:

W. C. Hartman

WC 1998 NGV

# RESTRICTED

### CASCADE SERVICES DEPARTMENT

### PROCESS LABORATORY

### RADIATION SURVEY

# HEALTH SURVEY REPORT

Date of Issue September 23, 1947

### DISTRIBUTION LIST

Mr. L. G. Bamer
Mr. S. C. Barnett
Dr. C. K. Beck
Dr. M. J. Costello
Mr. W. C. Hartman
Mr. A. P. Huber
Mr. W. B. Humes
Dr. F. W. Hurd
Mr. M. S. Lisso

Mr. J. A. Marshall
Mr. H. M. Preuss
Mr. M. F. Schwenn
Mr. M. P. Seyfried
Mr. G. T. E. Sheldon
Mr. B. Speyers
Mr. S. Visner
Mr. L. C. Willson
File

To: Mr. G. T. E. Sheldon Location: K-303-7

Date: September 23, 1947

9-15-47 In K-1303 the beta-gamma determinations on the decontamination tanks, work bench, and tool table in the decontamination room varied from 0.000 to 0.028 with an average of 0.003 R/8 hours.

In K-1301 the beta-gamma determinations on the furnaces, heaters, and reactors in the conversion room were all zero.

9-10-47 All beta-gamma determinations on the cylinders and carbon traps in K-631 were zero.

All beta-gamma determinations on the carbon traps in K-131 were zero; the ones made on the cylinders varied from 0.005 to 0.019 and averaged 0.010 R/8 hours.

9-17-67 In the decontamination room in K-1303, beta-gamma determinations on the tool table and decontamination tanks varied from 0.000 to 0.069 with an average of 0.008 R/8 hours.

In the conversion room in K-1303, all beta-gamma determinations were zero.

9-18-47 In K-631 on the cylinders and carbon traps all beta-gamma determinations were zero.

In K-131 the beta-gamma determinations on the carbon traps were all zero and those on the cylinders varied from 0.007 to 0.012 with an average of 0.011 R/8 hours.

9-19-47 The beta-gamma determinations made on the reactors, cold traps, and heaters in the conversion room in K-1301 were all zero.

The beta-gamma determinations made on the decontamination tanks and tool table in the decontamination room in K-1303 varied from 0.000 to 0.072 and averaged 0.009 R/8 hours.

Air samples of air-borne alpha-active dusts taken during the week were as follows:

K-306-7 P.W. Station seven feet west	9-15-47	0.0	Alpha counts/min/ft3
of withdrawal manifolds	9-16-47	0.1	π
	9-17-47	0.1	n
	9-18-47	0.1	ŧı
	9-19-47	0.1	n

K-1801 outside of weighing room door	9-15-47 9-17-47	0.1	Alpha counts/min/ft3
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	9-19-47	0.0	π
K-1303 docontamination room	9-15-47	0.4	TT .
between tank A and E	9-17-47	0.2	
	9-19-47	0.1	
,	0 19 49	0 0	m
K-1401 laboratory	9-17-47	0.0	n
K-131 maar vaporization baths	9-16-47	0.0	n .
	9-18-47	8.0	Ħ
K-631 near draw off manifold	9-16-47		· · · · · · · · · · · · · · · · · · ·
	9-18-47	0.6	n
K-1401 rotubing area	9-16-47	0.0	
K-1401 AC pump shop	9-16-47	0:0	π
K-1405 laboratory	9-15-47	0.7	**
N-1303 Decontamination Room Requested by Mr. G. J. Selvin	9-15-47		
Three inches above tank L before solu agitated with air Three inches above tank L while solut		1.3	<b>t</b> t .
being agitated Three inches above tank L after agite the solution was stopped	tion of	4.2 0.8	Ħ
K-1303 Requested by Mr. H. M. Preuss	9-18-47		
Cubicle #4, one foot from pan evapore with fan on	•	0.0	n .
Cubicle #4, one foot from pan evapors with fan off Cubicle #3, one foot from evaporating		1.4	ૃ મ
with fan on	s unto	0.1	<b>n</b> .
K-1405 Requested by Mr. H. M. Preuss	9-18-47		
Two feet from original alumina, dust rising from the alumina Two feet from waste alumina,		32.5	π
dust rising from the alumina		0.9	ii .

H. J. Culbert

Approved:

W. C. Hartman

RESTRICTED

· JHP/nf

### CASCADE SERVICES DEPARTMENT

### PROCESS LABORATORY

RADIATION SURVEY

### HEALTH SURVEY REPORT

Date of Issue September 9, 1947

# DISTRIBUTION LIST

Mr. L. G. Bamer

Mr. S. C. Barnett

Dr. C. K. Beck

Dr. M. J. Costello

Mr. W. C. Hartman

Mr. A. P. Huber

Dr. F. W. Hurd

Mr. M. S. Lisso

Mr. J. A. Marshall

Mr. H. M. Prouss

Mr. M. P. Schwenn

Mr. M. P. Seyfriad

Mr. G. T. E. Sheldon

Mr. B. Speyors

Mr. S. Visner

Mr. L. C. Willson

File

To: Mr. G. T. E. Sheldon Date: September 9, 1947 Location: K-303-7

9-2-47 Beta-gamma determinations on the cylinders and carbon traps in K-631 were all zero.

In K-131 the beta-gamma measurements on the cylinders varied from 0.007 to 0.034 with an average of 0.019 R/8 hours.

9-3-47 Beta-gamma measurements on the decontamination tanks, work bench, and tool table in the decontamination room in K-1303 varied from 0.000 to 0.035 and averaged 0.003 R/8 hours.

Bota-gamma measurements on the cold traps and reactors in the Conversion Room in K-1301 were all zero.

9-1-47 In K-631 beta-gamma measurements on the carbon traps and the cylinders were all zero.

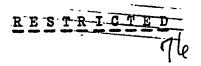
In K-151 beta-gamma measurements on the cylinders ranged from 0.005 to 0.021 with an average of 0.012 R/8 hours.

9-5-47 In the decontamination room in K-1303, beta-gamma determinations ranged from 0.000 to 0.016 and averaged 0.005 R/8 hours.

Beta-gamma measurements on the cold traps, heaters, and reactors in the Conversion Room in K-1301 were all zero.

Air camples of air-borne alpha-active dusts taken during the week were as follows:

K-30G-7 P.W. Station .	9-1-47 9-2-47 9-3-47 9-4-47	0.1 Alpha counts/min/ft <sup>S</sup> 0.4 " 0.5 " 0.3 "
K-1410 near carbon-alumina separator	9-2-47 9-4-47	0.1 ""
K-631 near draw-off manifold	9 <b>-2-47</b> 9 <b>-4-4</b> 7	0.6 ** 0.1 **



K-131 near vaporization baths	9-2-47		Alpha counts/min/ft3
	9-4-47	0.2	<b>₩</b>
K-1401 retubing area	9-2-47	0.0	<b>H</b>
K-1401 AC Pump Shop	9-2-47	0.0	
K-1301 Outside weighing room	8-29-47	0.1	
• -	9-5-47	0.1	TF.
K-1303 Decontamination Room			
oylinders being opened	8-29-47	12.6	#
normal operation	9-5-47	0.2	n.
F-01 in work area	9-2-47	0.2	₩
	9-2-47	0.6	n
	9-2-47	0.0	· #
	9-4-47	0.8	_
	9-4-47	0.0	*
	9-4-47	_	
K-306-1 cylinder repair shop			
no operations proceeding	9-3-47	0.1	₩
Y305-12			
no operations proceeding	9-3-47	0.1	*
K-306-4 Cell #6, instrument change	9-3-47	0.1	#
in ode i doza Nob amon di	9-3-47	0.0	
K-306-5 Coll #14, instrument change	9-3-47	0.1	
H-000-0 0071 "Fri tunga amera amera	9-3-47	0.0	
	9-3-47	0.1	
K-305-8 Line Recorder Station	9-4-47		
+	9-4-47	0.0	
special operation in progress	2-3-31	0.0	
K-303-5 Cell #7 seal change.	9-4-47	0.0	ti
pump 5A	9-4-47	0.0	<u> </u>
	9-4-47	0.0	•

H. T. Culbert

Approved:

W. C. Rayer

JHP/nf

# CASCADE SERVICES DEPARTMENT

# PROCESS LABORATORY

RADIATION SURVEY

# HEALTH SURVEY REPORT

Date of Issue September 5, 1047

# DISTRIBUTION LIST

Mr. L. G. Bamer
Mr. S. C. Barnett
Dr. C. K. Beck
Dr. M. J. Costallo
Mr. W. C. Bartman
Mr. A. P. Huber
Dr. F. W. Hurd
Mr. J. A. Kgrshall

Mr. H. M. Preuss
Mr. M. P. Schwann
Mr. M. P. Soyfried
Mr. G. T. E. Shelden
Mr. B. Speyers
Mr. S. Viener
Mr. L. C. Willson
File

To: Mr. G. T. E. Sheldon Location: K-305-7 Date: September 4, 1947

8-25-47 Beta-gamma determinations on the heaters and reactors in the Conversion Room in K-1301 were all zero.

All beta-gamma determinations made in the survey in K-1069 were zero.

8-28-47 All of the beta-gamma measurements made on the cylinders and carbon traps in K-631 were zero.

In K-131 beta-gamma measurements on the cylinders varied from 0.011 to 0.014 and averaged 0.013 R/8 hours; all measurements on the carbon traps in K-131 were zero.

8-27-47 In the K-1301 Conversion Room beta-gamma readings on the reactors and heaters were all zero.

In the decontamination room in K-1303 beta-gamma measurements on the decontamination tanks, work bench, and tool table varied from 0.000 to 0.038 with an average of 0.005 R/8 hours.

8-28-47 In K-651 beta-gamma determinations on the cylinders and carbon traps were all zero.

Beta-gamma measurements on the cylinders in K-131 ranged from C.005 to O.012 and averaged O.009 R/8 hours.

8-29-47 Beta-gamma measurements on the decontemination tanks, work bench, and tool table in the decontamination room in K-1303 varied from 0.000 to 0.055 with an average of 0.006 R/8 hours.

In the conversion room in K-1301 beta-gamma measurements on the heaters and reactors were all zero.

Air samples of air-borne alpha-active dusts taken during the week were as follows:

K=306-7 P. W. Station

8-25-47 0.0 Alpha counts/min/ft<sup>3</sup>
8-26-47 0.3 "
8-27-47 0.05 "
8-28-47 0.4 "
8-29-47 0.1 "

up to-date on this location.

RESTRICTED

1

K-1405 Laboratory	8-25-47		a counts/min/ft3
K-1405 Nownstairs Room	8-25-47	0.0	11
K-1401 Conditioning Laboratory	8-25-47	0.0	<b>†</b> ?
K-1301 Outside weighing room	8-25-47	0.0	π
K-1303 Decentamination Room	8-25-47	0.3	n ·
n. 2000 17000Hummanu on ocom	8-27-47	1.6	tt
K-1410 Near carbon-alumina			
separator	8-26-47	0.1	. <b>n</b>
K-631 near draw-off manifold	8-26-47	0.0	11
	8-26-47	0.1	19
K-131 near vaporization baths	8-26-47	0.0	tt
K-1401 retubing area			#
K-1401 AC pump shop	8-26-47	0.0	: :
F-Ol in work area	8-27-47	0.0	"
	8-27-47	0.1	• •
	8-27-47	1.4	n
X-305-4 Cell #7 seal change. Pump 1B	8-28-47		
Seal being removed and deposit	0-20-21		•
of material between seal and			
back plate being removed		13.2 Alph	a counts/min/ft3
Seal being replaced		0.2	11
Bearing being replaced		0.2	11
Duration of operation		1.0	17

H J Cullier

H. J. Culbert

Approved:

W. C. Hartman

JHP/nf

# CASCADE SERVICES DEPARTMENT

### PROCESS LABORATORY

### RADIATION GROUP

### HEALTH SURVEY REPORT

Date of Issue August 28, 1947

### DISTRIBUTION LIST

Mr. L. G. Bamer
Mr. S. C. Barnett
Dr. C. K. Beck
Dr. M. J. Costello
Mr. W. C. Hartman
Mr. A. P. Huber
Dr. F. W. Hurd
Mr. J. A. Marshall

Mr. H. M. Preuss
Mr. M. F. Schwenn
Mr. M. P. Seyfried
Mr. G. T. E. Shelden
Mr. B. Speyers
Mr. S. Visnor
Mr. L. C. Willson
File

To: Mr. G. T. E. Sheldon Location: K-303-7 Date: August 28, 1947

- 8-18-47 Beta-gamma measurements on the decontamination tanks, work bench, and tool table in the decontamination room in K-1303 ranged from 0.000 to 0.018 and averaged 0.002 R/8 hours.
- 8-19-47 All beta-gamma measurements on the cylinders and carbon traps in K-631 registered zero.

On the cylinders at K-131 beta-gamma measurements varied from 0.007 to 0.018 and averaged 0.012 R/8 hours.

U-20-47 In the conversion room in K-1301, beta-gamma measurements on the heaters and reactors were all zero.

In the decontamination room in K-1303, beta-gamma measurements on the decontamination tanks ranged from 0.000 to 0.007 with an average of 0.002 R/8 hours.

8-21-47 In K-631 all beta-gamma measurements on cylinders and carbon traps were zero.

In K-131 beta-gamma measurements on the cylinders varied from 0.000 to 0.018 with an average of 0.008 R/8 hours.

8-22-47 Beta-gamma measurements on the heaters and reactors in the conversion room in K-1301 were all zero.

In the K-1303 decontamination room beta-gamma measurements on the work bench and tool table were all zero and the measurements on the decontamination tanks ranged from 0.000 to 0.028 with an average of 0.006 R/8 hours.

Air samples taken during the week of air-borne alpha-active dusts were as follows:

K-306-7 P.W. Station	8-18-47	54.9 Alph	a counts/min/ft3
	8-19-47	7.3	<b>14</b>
	8-20-47	6.6	tt
	8-21-47	1.8	19
	8-22-47	0.1	<b>n</b> .

K-1301 outside weighing room	8-18-47 8-20-47 8-22-47		counts/min/fi <sup>3</sup>
K-1303 decontamination room	8-18-47 8-20-47 8-22-47		11 71 51
K-1401 conditioning Lab- oratory	8-18-47	0.1	n
K-1410 near carbon-alumina separator	8 <b>-</b> 19 <b>-</b> 47 8 <b>-</b> 21 <b>-</b> 47	0.1 0.0	n n
K-631 near draw-off manifold	8 <b>-</b> 19 <b>-</b> 47 8 <b>-</b> 21 <b>-</b> 47	0.0 0.1	n n
K-131 near vaporization baths	8-19-47 8-21-47	0.1 0.1	n n
F-01 in work area	8-20-47 8-20-47 8-20-47	0.9 0.6 0.6	11 11 -
K-1401 retubing area K-1401 AC pump shop K-1405 downstairs room K-1405 laboratory	8-21-47 8-21-47 8-22-47 8-22-47	. • -	17 18 18

H. J. Culbert

Approved:

W. C. Hartman

JEP/ni

### CASCADE SERVICES DEPARTMENT

### RADIATION GROUP

### HEALTH SURVEY REPORT

Date of Issue August 21, 1947

### DISTRIBUTION LIST

Mr. L. G. Bamer
Mr. S. C. Bernett
Mr. C. K. Beck
Dr. M. J. Costello
Mr. W. C. Hartman
Mr. A. P. Huber
Dr. F. W. Hurd
Mr. J. A. Marshall

Mr. H. M. Preuss
Mr. M. F. Schwenn
Mr. M. P. Seyfried
Mr. G. T. E. Sheldon
Mr. B. Speyers
Mr. S. Visner
Mr. L. C. Willson
File

# RADIATION SURVEY GROUP

#### HEALTH SURVEY REPORT

### Week Ending August 15th, 1947

8-11-47 Beta-gamma readings made in K-1301 at the cold trap and heaters in the Oxide Conversion Room ranged from 0.000 to 0.014 and averaged 0.004 R/8 hours.

Beta-germa readings taken on the decontamination tanks, work bench, and tool table in the decontamination room in K-1303 varied from Catto to 0.002, averaging 0.005 R/8 hours.

9-10-47 The shipping cylinders at X-151 had beta-grams readings which reafrom 0.00% to 0.018 and averaged 0.009 R/8 hours.

Beta-gayma measurements on the cylinders and traps at XV631 more zero.

2-13-47 In the decontamination room in K-1303, beta-gamma readings on the decontamination tanks, work bench, and tool table ran from 0.000 to 0.058 averaging 0.005 R/8 hours.

Beta-gamma measurements on the cold traps and reactors in the Comversion Room in K-1501 were zero.

0-14-47 In K-131 beta-gamma readings on the shipping cylinders varied from 0.007 to 0.014 and averaged 0.012 R/8 hours.

The beta-gamma readings on the cylinders in K-631 were zero.

S-15-47 In the decontamination room in K-1303, beta-gamma readings ranged from 0.0001 to 0.0138 with an average of 0.0059 R/S hours.

Air samples taken during the week for air-borne alpha-active dusts were as follows:

K-306-7	P.	₩.	Station	8-11-47	0.0	Alpha counts/min/ft3
				8-12-47	31.0	8
				8-15-47	0.6	n
				8-14-47	2.4	u
				8-15-47	61.6	n

K-1303 Decontamination Room	8-11-47 8-13-47 8-15-47	6.8	ha counts/min/ft3
K-1301 Outside weighing room door	8-11-47 8-13-47 8-15-47		11 11 11
K-1401 Retubing Area	8-11-47 8-14-47		n n
K-1401 A.C. Pump Shop	8-11-47 8-14-47		n 11
K-1410 near carbon-alumina separator	8-12-47 8-14-47	0.0 0.0	u n
K-131 near vaporization baths	8-12-47 8-14-47	0.1	11 ·
K-631 near draw-off manifold	8-12-47 8-14-47	0.1 0.0	11
F-Ql in work area	8-13-47 8-13-47 8-13-47	0.3 0.0 0.0	11 11
X-309-3 Intersectional Cell During special operation	8-15-47 8-15-47 8-15-47 8-15-47 8-15-47	0.6	11 11 11 11

H. J. Cullet

H. J. Culbert

Approved:

W. C. Hartman

RESTRICTED

JHP/nf